STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 115611

TO: Ralph J Gitomer **Location: 3d65 / 3e71** **Tuesday, March 09, 2004** **Art Unit: 1651** **Phone: 272-0916** **Serial Number: 09 / 977539**	**From: Jan Delaval** **Location: Biotech-Chem Library** **Rem 1A51** **Phone: 272-2504** **jan.delaval@uspto.gov**

Search Notes

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

SEARCH REQUEST FORM

11561 1

Requestor's Name: R GITOMER Serial Number: 09/977,539

Date: 3/1/04 Phone: 272-0916 Art Unit: 1651

AFM 3D65 / 3E71

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

JAN

STAFF USE ONLY

Date completed: 3/5/04

Searcher: Jan

Terminal time:

Elapsed time: 15 + 0

CPU time:

Total time:

Number of Searches:

Number of Databases:

Search Site

- ✓ STIC
- CM-1
- Pre-S

Type of Search

- N.A. Sequence
- A.A. Sequence
- Structure
- ✓ Bibliographic

Vendors

- IG Suite
- ✓ STN
- Dialog
- APS
- Geninfo
- SDC
- DARC/Questel
- Other

=> => fil hcaplus
FILE 'HCAPLUS' ENTERED AT 12:57:11 ON 09 MAR 2004

FILE COVERS 1907 - 9 Mar 2004 VOL 140 ISS 11
FILE LAST UPDATED: 8 Mar 2004 (20040308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all tot

L86 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:492567 HCAPLUS
DN 139:32881
ED Entered STN: 29 Jun 2003
TI Carrier and specimen-handling tool for use in diagnostic testing
IN **Peterson, Kristy; McMichael, Donald J.**
PA USA
SO U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM C12M001-26
NCL 435309100; 435810000
CC **9-1 (Biochemical Methods)**
Section cross-reference(s): 14
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003119181	A1	20030626	US 2001-26200	20011221
	WO 2003057042	A1	20030717	WO 2002-US18736	20020613

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2001-26200 A 20011221
AB A diagnostic system may include a carrier having at least one well, an upper surface, and a cavity extending downwardly from the upper surface. A specimen-handling tool may be configured to be positioned within the cavity and may include an elongated body having a longitudinal axis that extends along the length of the elongated body, a first end comprising an outermost portion adapted to skewer a tissue biopsy specimen.

ST carrier specimen handling tool diagnostic testing
IT Tools
(Specimen-handling; carrier and specimen-handling tool for use in diagnostic testing)
IT Materials handling
(apparatus; carrier and specimen-handling tool for use in diagnostic testing)
IT Animal tissue
Carriers
Clinical analyzers
Configuration
Diagnosis
Surface
Test kits
Wells
(carrier and specimen-handling tool for use in diagnostic testing)
IT Plastics, uses
Polycarbonates, uses
RL: DEV (Device component use); USES (Uses)
(carrier and specimen-handling tool for use in diagnostic testing)
IT Analysis
(clin.; carrier and specimen-handling tool for use in diagnostic testing)

L86 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:320162 HCAPLUS
DN 138:299800
ED Entered STN: 25 Apr 2003
TI A system for detection of urease in a human gastric sample for diagnosis of gastrointestinal bacterial infection
IN **McMichael, Donald J.**; **Peterson, Kristy**; **Marshall, Barry J.**; Mendis, Aruni H. W.; Chairman, Simon
PA Kimberly-Clark Worldwide, Inc., USA
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N033-48
CC 7-1 (Enzymes)
Section cross-reference(s): 14
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003034061	A2	20030424	WO 2002-US29814	20020918
	WO 2003034061	A3	20031030		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003077680	A1	20030424	US 2001-977555	20011015
	US 2003077684	A1	20030424	US 2001-977874	20011015
	US 2003082664	A1	20030501	US 2001-977556	20011015
	US 2003082661	A1	20030501	US 2001-977667	20011015
PRAI	US 2001-977555	A	20011015		
	US 2001-977556	A	20011015		
	US 2001-977667	A	20011015		

US 2001-977874 A 20011015

AB A system and method for detecting bacterial infections in the human gastrointestinal tract is disclosed. In one embodiment, the system includes a first composition separated from a second composition The first composition contains urea in powdered form. The second composition, on the other hand, contains an indicator. A biopsy of a gastric sample is first contacted with the first composition and then placed in the second composition The second composition indicates the presence of an enzyme that, in turn, indicates the presence of bacteria. In an alternative embodiment of the present invention, a biopsy of a gastric sample is contacted with a single composition The composition contains urea in a powdered form combined with a dry indicator. Besides urea and a dry indicator, the composition can also contain an anticaking agent. The system of the present invention can include a container for holding the compns. A specimen handling tool can be included in the container for handling a biopsy sample.

ST urease biopsy detection gastrointestinal bacterial infection diagnosis human; urea anticaking agent indicator urease detn gastrointestinal infection diagnosis

IT Titration
(acid-base, pH adjuster; system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT Analytical apparatus
(biochem.; system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT Stomach
(biopsy; system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT Digestive tract, disease
(infection; system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT Diagnosis
(mol.; system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT Particle size
(of urea powder; system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT Acid-base indicators
Agglomeration preventers
Antibacterial agents
Colorimetric indicators
Containers
Digestive tract
Digestive tract, disease
Films
Gels
Human
Indicators
Powders
Sample preparation
Test kits
(system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT 1344-00-9, Sodium aluminosilicate 7631-86-9, Silica, biological studies
RL: ARU (Analytical role, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(anticaking agent; system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT 9002-18-0, Agar
RL: ARU (Analytical role, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(gel; system for detection of urease in human gastric sample for

diagnosis of gastrointestinal bacterial infection)

IT 57-13-6, Urea, biological studies
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(powder; system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT 7664-41-7, Ammonia, biological studies
RL: ANT (Analyte); ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT 9002-13-5, Urease
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

IT 143-74-8, Phenol red
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(system for detection of urease in human gastric sample for diagnosis of gastrointestinal bacterial infection)

L86 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:300536 HCAPLUS
DN 138:283719
ED Entered STN: 18 Apr 2003
TI Methods for performing multiple diagnostic tests
IN **McMichael, Donald J.; Peterson, Kristy; Marshall, Barry J.**
PA USA
SO U.S. Pat. Appl. Publ., 14 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM C12Q001-04
NCL 435034000
CC **9-16 (Biochemical Methods)**
Section cross-reference(s): 10, 14
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 2003073155	A1	20030417	US 2001-977539	20011015	<--
	WO 2003033149	A2	20030424	WO 2002-US28269	20020905	
	WO 2003033149	A3	20030731			

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI	US 2001-977539	A	20011015
	US 2001-977546	A	20011015

AB A method for diagnostic testing that includes obtaining a first specimen and, in some methods, obtaining a second specimen. The first specimen may be positioned in the first well of a carrier. The second specimen may be positioned in the second well of a carrier. The first well of the carrier may then be separated from the second well of the carrier.

ST performing diagnostic test

IT **Carriers**
Composition
Diagnosis
Helicobacter pylori
Separation
Separators
Wells
(methods for performing multiple diagnostic tests)

L86 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:297518 HCAPLUS
ED Entered STN: 17 Apr 2003
TI Systems for performing multiple diagnostic tests
IN **Marshall, Barry J.; McMichael, Donald J.; Peterson, Kristy**
PA Australia
SO U.S. Pat. Appl. Publ.
CODEN: USXXCO
DT Patent
LA English
IC ICM G01N021-03
NCL 422102000; 422058000
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2003072686	A1	20030417	US 2001-977546	20011015
WO 2003033149	A2	20030424	WO 2002-US28269	20020905
WO 2003033149	A3	20030731		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2001-977539 A 20011015
US 2001-977546 A 20011015
AB A diagnostic system for diagnostic testing having a carrier including at least one well, and a specimen-handling tool disposed about at least a portion of the well.

L86 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:297516 HCAPLUS
ED Entered STN: 17 Apr 2003
TI Systems for diagnostic testing
IN **Peterson, Kristy; Marshall, Barry J.; McMichael, Donald J.**
PA USA
SO U.S. Pat. Appl. Publ.
CODEN: USXXCO
DT Patent
LA English
IC ICM B01L003-00
NCL 422061000; 422058000; 422099000; 422102000; 422939000; 422941000; 422945000; 435288300; 435288400
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2003072678	A1	20030417	US 2001-977547	20011015

WO 2003033148 A1 20030424 WO 2002-US17621 20020603
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-977547 A 20011015
AB A diagnostic system for diagnostic testing having a carrier including at least one well, and a specimen-handling tool disposed about at least a portion of the well.

L86 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:760079 HCAPLUS
DN 135:284999
ED Entered STN: 19 Oct 2001
TI Method and kit for the early diagnosis of miscarriage in human beings
IN Maccarrone, Mauro; Valensise, Herbert; Finazzi, Agro' Alessandro
PA Universita Degli Studi Di Roma " Tor Vergata", Italy
SO Eur. Pat. Appl., 28 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C12Q001-34
ICS C12Q001-68; G01N033-573
CC 7-1 (Enzymes)
Section cross-reference(s): 3, 14
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1146128	A1	20011017	EP 2000-830285	20000414
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
WO 2001079531	A1	20011025	WO 2001-IT189	20010417
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1272659	A1	20030108	EP 2001-925881	20010417
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRAI EP 2000-830285 A 20000414
WO 2001-IT189 W 20010417
AB The present invention relates to a method for the diagnosis of miscarriage in female human beings based on the detection of the presence of the enzyme anandamide hydrolase (FAAH) active in blood cells and in particular in lymphocytes, and a diagnosis kit useful in the performance of said method.
ST kit diagnosis miscarriage
IT Columns and Towers
(C18; method and kit for early diagnosis of miscarriage in human beings)
IT Reaction
(Enzymic; method and kit for early diagnosis of miscarriage in human beings)

IT Solutions
(Physiol. buffered; method and kit for early diagnosis of miscarriage in human beings)
IT PCR (polymerase chain reaction)
(RT-PCR (reverse transcription-PCR); method and kit for early diagnosis of miscarriage in human beings)
IT Immunoassay
(enzyme-linked immunosorbent assay; method and kit for early diagnosis of miscarriage in human beings)
IT Immunoassay
(enzyme; method and kit for early diagnosis of miscarriage in human beings)
IT Gene
(expression; method and kit for early diagnosis of miscarriage in human beings)
IT Adhesion, physical
Blood analysis
Blood cell
Buffers
Carriers
Cell
Coating materials
Composition
Concentration (condition)
Concentration (process)
Containers
Cytolysis
Detergents
Diagnosis
Dilution
Extraction
Growth, microbial
HPLC
Homogenization
Lymphocyte
Mixtures
Platelet (blood)
Temperature
Test kits
Volume
Washing
(method and kit for early diagnosis of miscarriage in human beings)
IT mRNA
RL: ANT (Analyte); ANST (Analytical study)
(method and kit for early diagnosis of miscarriage in human beings)
IT Antibodies
RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)
(method and kit for early diagnosis of miscarriage in human beings)
IT Gelatins, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(method and kit for early diagnosis of miscarriage in human beings)
IT Proteins, general, analysis
RL: ARU (Analytical role, unclassified); PEP (Physical, engineering or chemical process); RCT (Reactant); ANST (Analytical study); PROC (Process); RACT (Reactant or reagent)
(method and kit for early diagnosis of miscarriage in human beings)
IT Laboratory ware
(reaction vessels; method and kit for early diagnosis of miscarriage in human beings)
IT Abortion
(spontaneous; method and kit for early diagnosis of miscarriage in human beings)

IT **Wells**
(walls; method and kit for early diagnosis of miscarriage in human beings)
IT 153301-19-0, Anandamide hydrolase
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method and kit for early diagnosis of miscarriage in human beings)
IT 330-13-2, p-Nitrophenylphosphate 9001-78-9, Alkaline phosphatase
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(method and kit for early diagnosis of miscarriage in human beings)
IT 7732-18-5, Water, analysis 9005-64-5, Tween-20 14265-44-2, Phosphate, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(method and kit for early diagnosis of miscarriage in human beings)
IT 497-19-8, sodium carbonate, biological studies 26628-22-8, Sodium azide
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(method and kit for early diagnosis of miscarriage in human beings)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Maccarrone, M; ANALYTICAL BIOCHEMISTRY 1999, V267, P314 HCAPLUS
(2) Matsunaga, I; JOURNAL OF BIOCHEMISTRY 1998, V124(1), P105 HCAPLUS
(3) Paria, B; BIOLOGY OF REPRODUCTION 1999, V60, P1151 HCAPLUS
(4) Piomelli, D; US 5925672 A 1999 HCAPLUS

FILE 'HCAPLUS' ENTERED AT 12:46:10 ON 09 MAR 2004
L59 1 S US20030073155/PN
L60 514116 S (BIOCHEM?(L)METHOD?)/SC,SX
E WELL/CT
E E26+ALL
L61 1999 S E3,E2
L62 152 S L60 AND L61
L63 19 S L62 AND SEPARAT?/CW
L64 7 S L62 AND CARRIER?/CW
L65 25 S L63,L64
E MCMICHAEL D/AU
L66 7 S E6
E MC MICHAEL D/AU
E PETERSON K/AU
L67 152 S E3-E17
E PETERSON KRIS/AU
L68 6 S E3,E11
E MARSHALL B/AU
L69 73 S E3,E12
L70 16 S E26-E28
L71 2 S L66-L70 AND L65
L72 5 S L66 AND L67-L70
L73 4 S L67,L68 AND L69,L70
L74 5 S L72,L73
L75 5 S L59,L71-L74
L76 1610 S WELL#/CW AND CARRIER#/CW
L77 4 S L76 AND SEPARAT?/CW
L78 3 S L76 AND DIAGNO?/CW
L79 1 S L76 AND (H OR HELICOBACT? OR HELICO BACT?)()PYLOR?
L80 1 S L76 AND HELICOBACT?
E HELICOBACTER/CT
L81 6570 S E3-E36
E E3+ALL
L82 7734 S E4+NT
E CAMPYLOBACTER/CT
L83 3690 S E3-E48
E E3+ALL

```
L84         2606 S E4+NT
L85            1 S L76 AND L81-L84
L86            6 S L75,L78-L80,L85 AND L59-L85

     FILE 'HCAPLUS' ENTERED AT 12:57:11 ON 09 MAR 2004

=> => d his

     (FILE 'HOME' ENTERED AT 13:09:03 ON 09 MAR 2004)
               SET COST OFF

     FILE 'WPIX' ENTERED AT 13:09:13 ON 09 MAR 2004
L1             1 S US20030073155/PN
L2         54419 S C12Q001/IC,ICM,ICS
L3         16021 S C12M001/IC,ICM,ICS,ICA,ICI
L4           374 S L2 AND (B11-C08C OR C11-C08C)/MC
L5           254 S L2 AND (B11-C06 OR C11-C06)/MC
L6          4687 S L2 AND L3
L7          5089 S L4-L6
L8           508 S L7 AND C12Q001-04/IC,ICM,ICS
L9            88 S L7 AND (B04-F10A OR C04-F10A OR B04-B02B1 OR C04-B02B1)/MC
L10           17 S L7 AND ((H OR HELICOBACT? OR HELICO BACT?)()PYLOR?)/BIX
L11          626 S L7 AND (B04-F10# OR C04-F10# OR B04-F09# OR C04-F09# OR B04-F
L12           15 S L7 AND (CAMPYLOBACT? OR CAMPYLO BACT?)/BIX
L13           32 S L10,L12
L14           32 S L13 AND L2-L13
               SEL PN APPS 5 6 11 14 15
               SEL PN L14 5 6 11 14 15
L15            5 S E21-E28
L16           16 S L4 AND L5
L17           15 S L16 NOT L14
               SEL DN 1 12 15
L18            3 S E29-E34
L19           59 S L6 AND C12M001-18/IC,ICM,ICS
               SEL DN AN 7 8 10 13 14 16 20-23 38 39 49 55 57
L20           15 S E36-E67
L21           23 S L15,L18,L20
L22          293 S L2 AND ((H OR HELICOBACT? OR HELICO BACT?)()PYLOR?)/BIX
L23          311 S L2 AND (HELICOBACT? OR HELICO BACT?)/BIX
L24          137 S L2 AND (CAMPYLOBACT? OR CAMPYLO BACT?)/BIX
L25          438 S L22-L24
L26           14 S L8 AND L25
L27            8 S L25 AND (B11-C08C OR C11-C08C)/MC
L28            2 S L25 AND (B11-C06 OR C11-C06)/MC
L29            0 S L2 AND C12M001-18/IC,ICM,ICS NOT L19
L30          272 S L25 AND D05-H09/MC
L31          266 S L25 AND (B12-K04A? OR C12-K04A?)/MC
L32          364 S L30,L31
L33           20 S L32 AND L3
               SEL DN AN 3
L34            1 S E68-E69
L35           23 S L21,L34 AND L1-L34
               E MARSHALL B/AU
L36           51 S E3,E11
               E MCMICHAEL D/AU
L37           13 S E5
               E MC MICHAEL D/AU
               E PETERSON K/AU
L38          214 S E3-E24
               E KIMBERLEY/PA
L39         4129 S E4-E9,E35-E44
L40           24 S L2 AND L36-L39
L41            7 S L40 AND C12M/IC,ICM,ICS
```

```
L42          11 S L36-L39 AND C12M/IC,ICM,ICS
L43          11 S L41,L42
L44          14 S L36-L38 AND L39
L45          40 S L40-L44
                SEL DN AN 10 15 16 17 32
L46           5 S E1-E13
L47          27 S L35,L46 AND L1-L46
L48          17 S L36-L39 AND (HELICOBACT? OR CAMPYLOBACT? OR PYLOR?)/BIX
L49           6 S L48 NOT L45
L50           4 S L47 AND L48
L51          27 S L47,L50

=> fil wpix
FILE 'WPIX' ENTERED AT 13:31:20 ON 09 MAR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE LAST UPDATED:          5 MAR 2004      <20040305/UP>
MOST RECENT DERWENT UPDATE:     200416        <200416/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE


>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
    PLEASE VISIT:
 http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
    http://thomsonderwent.com/coverage/latestupdates/           <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
    GUIDES, PLEASE VISIT:
    http://thomsonderwent.com/support/userguides/               <<<

>>> ADDITIONAL POLYMER INDEXING CODES WILL BE IMPLEMENTED FROM
    DERWENT UPDATE 200403.
    THE TIME RANGE CODE WILL ALSO CHANGE FROM 018 TO 2004.
    SDIS USING THE TIME RANGE CODE WILL NEED TO BE UPDATED.
    FOR FURTHER DETAILS: http://thomsonderwent.com/chem/polymers/ <<<


=> d all abeq tech abex tot

L51  ANSWER 1 OF 27  WPIX  COPYRIGHT 2004 THOMSON DERWENT on STN
AN   2004-100396 [11]    WPIX
DNN  N2004-079986        DNC C2004-041642
TI   Disposable sample carrier, for mass spectrometry of bio-molecules, has a
     high precision sub-structure for repeated use covered by a disposable thin
     plastics layer with the prepared sample wells.
DC   B04 D16 J04 S03
IN   SCHUERENBERG, M
PA   (BRUK-N) BRUKER DALTONIK GMBH
CYC  2
PI   DE 10230328    A1 20040115 (200411)*        9p    G01N027-64
     GB 2391066     A  20040128 (200413)              H01J049-04
ADT  DE 10230328 A1 DE 2002-10230328 20020705; GB 2391066 A GB 2003-15646
     20030703
PRAI DE 2002-10230328 20020705
IC   ICM  G01N027-64; H01J049-04
     ICS  C12M001-34; C12Q001-68; G01N001-28; G01N033-48
AB   DE  10230328 A UPAB: 20040213
     NOVELTY - The disposable sample carrier, for mass spectrometry, having a
     composite structure, is new.
          DETAILED DESCRIPTION - The disposable sample carrier, for mass
     spectrometry, has a composite structure. The sub-structure (3) has a high
```

mechanical strength with a high precision in its fabrication, and a removable relatively thin plastics layer (1) with a consistent thickness fitted with matrix-filled micro-titration sample wells (10), held in place by tongues (2). The sub-structure can be used repeatedly after the plastics layer has been removed and discarded. The sub-structure carries an identification as a barcode (7) and a transponder (8), and has a recess (9) for gripping by a robot arm.

USE - The disposable sample carrier is for use with matrix assisted laser desorption ionization (MALDI) mass spectrometry, in the analysis of bio-molecules e.g. DNA and RNA, glyco- and lipoproteins.

ADVANTAGE - The sample carrier is inexpensive and can be prepared by the supplier with the required matrix, etc., to be held in a magazine for immediate use in an automated pipetting system.

DESCRIPTION OF DRAWING(S) - The drawing shows a perspective view of the sample carrier.

plastics layer 1
tongues 2
sub-structure 3
barcode 7
transponder 8
recess for a robot arm grip 9
micro-titration wells 10

Dwg.3/3

FS CPI EPI
FA AB; GI
MC CPI: B04-E03; B04-N05; B04-N06; **B11-C06**; B11-C08A; **B11-C08C**; B11-C08D; B12-K04; B12-K04E; D05-H08; D05-H09; D05-H13; J04-B01; J04-B01B
EPI: S03-E10; S03-E14H
TECH UPTX: 20040213
TECHNOLOGY FOCUS - METALLURGY - Preferred Apparatus: The sub-structure is of fine steel, hard aluminum or titanium.

L51 ANSWER 2 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **2003-765585** [72] WPIX
DNC **C2003-210204**
TI Specimen-handling tool for use with diagnostic test kit for diagnostic testing, has elongated body, and first end comprising outermost portion to skewer tissue biopsy specimen and inclined upper and lower surfaces.
DC A96 B04 P31
IN **MCMICHAEL, D J; PETERSON, K**
PA (MCMI-I) MCMICHAEL D J; (PETE-I) PETERSON K; (KIMB) **KIMBERLY-CLARK WORLDWIDE INC**
CYC 100
PI US 2003119181 A1 20030626 (200372)* 12p C12M001-26 <--
WO 2003057042 A1 20030717 (200372) EN A61B010-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
ADT US 2003119181 A1 US 2001-26200 20011221; WO 2003057042 A1 WO 2002-US18736 20020613
PRAI US 2001-26200 20011221
IC ICM A61B010-00; **C12M001-26**
ICS B01L003-00
AB US2003119181 A UPAB: 20031107
NOVELTY - A specimen-handling tool comprises an elongated body with a longitudinal axis extending along the length of the body, and two ends. The first end comprises an outermost portion adapted to skewer a tissue biopsy specimen and inclined upper and lower surfaces. The outermost portion is formed as a truncated crescent so that its tip is not aligned

with the longitudinal axis.

DETAILED DESCRIPTION - A specimen-handling tool (24) comprises an elongated body (62) with a longitudinal axis extending along the length of the body, and two ends. The first end (58) comprises an outermost portion (66) adapted to skewer a tissue biopsy specimen. The outermost portion is formed as a truncated crescent so that the tip of the crescent is not aligned with the longitudinal axis of the body. The first end further comprises upper and lower surfaces (68, 70) that are inclined toward the upper surface. The upper surface is inclined toward the lower surface.

An INDEPENDENT CLAIM is also included for a diagnostic system comprising a carrier having well(s), upper surface (74), and a cavity extending downwardly from the upper surface; and the inventive specimen-handling tool positioned in the cavity of the carrier.

USE - For use with a diagnostic test kit for diagnostic testing for biological test specimens, e.g. blood, tissue biopsies, and saliva.

ADVANTAGE - The invention assists the user in accomplishing particular tasks, e.g. manipulating a specimen.

DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of the specimen-handling tool.

Specimen-handling tool 24
Rib 54
First end 58
Body 62
Gripping portion 64
Outermost portion 66
Upper and lower surfaces 68, 70
Upper surface 74
Dwg.7/18

FS CPI GMPI
FA AB; GI
MC CPI: A12-V03C2; B04-B04D; B04-B04L; B04-C03D; B11-C04; B11-C09
TECH UPTX: 20031107

TECHNOLOGY FOCUS - INSTRUMENTATION AND TESTING - Preferred Component: The second end further comprises a curved upper surface. A gripping portion (64) is disposed between the ends and comprises rib(s) (54). The wells are D-shaped and the carrier is rectangular.

TECHNOLOGY FOCUS - POLYMERS - Preferred Material: The tool is formed of a rigid plastic, preferably polycarbonate. The carrier is formed from polycarbonate.

L51 ANSWER 3 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **2003-605956** [57] WPIX
CR 2003-555945 [52]
DNN **N2003-483041** DNC **C2003-164978**
TI Diagnostic system for testing e.g. tissue biopsy comprises specimen handling tool fitted within cavity of carrier and having wells separated by perforations.
DC A89 B04 S03 S05
IN **MARSHALL, B J; MCMICHAEL, D J; PETERSON, K**
PA (MARS-I) MARSHALL B J; (MCMI-I) MCMICHAEL D J; (PETE-I) PETERSON K; (KIMB) **KIMBERLY-CLARK WORLDWIDE INC**
CYC 101
PI US 2003072686 A1 20030417 (200357)* 14p G01N021-03
WO 2003033149 A2 20030424 (200357) EN B01L003-00
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
ADT US 2003072686 A1 US 2001-977546 20011015; WO 2003033149 A2 WO 2002-US28269

20020905
PRAI US 2001-977546 20011015; US 2001-977539 20011015
IC ICM B01L003-00; G01N021-03
ICS B01L011-00
AB US2003072686 A UPAB: 20030906
NOVELTY - Diagnostic system has carrier (22) with pair of wells (26,28) which are separated by perforation (35). A specimen handling tool (24) has two arms that are connected to each other to form a joined narrow projection, which is fitted within the cavity (30) of the carrier, to manipulate specimen.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the carrier.
USE - For performing multiple diagnostic testing of specimens such as blood, tissue biopsies and saliva for presence of e.g. **Helicobacter pylori.**
ADVANTAGE - Since the wells are separated by perforations, the processing, monitoring, handling and storage of test specimens is performed automatically and easily within the cavity of the carrier. The specimen is accurately positioned within the cavity by the specimen handling tool, so enhancing the overall performance and efficiency of the diagnostic system.
DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of the diagnostic system.
Carrier 22
Handling tool 24
Wells 26,28
Cavity 30
Perforation 35
Dwg.1/17
FS CPI EPI
FA AB; GI; DCN
MC CPI: A12-L04B; B04-B04D; B04-B04G; B04-B04L; B04-F01; B04-F10A; B11-C08; B12-K04A
EPI: S03-E14H; S03-E15; S05-C01; S05-C02; S05-C03
TECH UPTX: 20030906
TECHNOLOGY FOCUS - POLYMERS - Preferred Carrier: The carrier comprises material such as plastic including polycarbonate, polystyrene, polypropylene, polyethylene, polyvinylchloride and other type of polyolefin.

L51 ANSWER 4 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **2003-605955** [57] WPIX
DNN **N2003-483040** DNC **C2003-164977**
TI System for diagnostic testing biological samples such as tissue biopsy for determining specific bacteria, comprises carrier with two wells and specimen-handling tool disposed about portion of wells.
DC A23 A89 B04 P31 S03
IN **MARSHALL, B J**; **MCMICHAEL, D J**; **PETERSON, K**
PA (MARS-I) MARSHALL B J; (MCMI-I) MCMICHAEL D J; (PETE-I) PETERSON K; (KIMB) **KIMBERLY-CLARK WORLDWIDE INC**
CYC 100
PI US 2003072678 A1 20030417 (200357)* 14p B01L003-00
WO 2003033148 A1 20030424 (200357) EN B01L003-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
ADT US 2003072678 A1 US 2001-977547 20011015; WO 2003033148 A1 WO 2002-US17621 20020603
PRAI US 2001-977547 20011015
IC ICM B01L003-00

ICS A61B017-30
AB US2003072678 A UPAB: 20030906
NOVELTY - A system (20) for diagnostic testing comprises a carrier (22) having a first and second wells (26,28) and a specimen-handling tool (24) disposed about at least a portion of the first or second well.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a carrier; and
(2) a specimen handling tool.
USE - For use in diagnostic testing of biological specimens such as tissue biopsies, blood or saliva for determining the presence of e.g. **Helicobacter pylori.**
ADVANTAGE - The system is utilized for many types of diagnostic testing.
DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of system, carrier and specimen-handling tool.
Diagnostic system 20
Carrier 22
Specimen-handling tool 24
First and second wells 26,28
Dwg.1/17
FS CPI EPI GMPI
FA AB; GI; DCN
MC CPI: A05-E06; A12-L04B; B04-B04D; B04-B04G; B04-C03D; B04-F01; B04-F10; B11-C08; B12-K04A4
EPI: S03-E14H; S03-E15
TECH UPTX: 20030906
TECHNOLOGY FOCUS - POLYMERS - Preferred Component: The carrier is formed from polycarbonate.

L51 ANSWER 5 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **2003-555945** [52] WPIX
CR 2003-605956 [57]
DNC **C2003-150083**
TI Diagnostic testing comprises obtaining first specimen and second specimen, positioning first and second specimen in first and second well of carrier, respectively, and separating first well from second well of carrier.
DC B04
IN **MARSHALL, B J; MCMICHAEL, D J; PETERSON, K**
PA (MARS-I) MARSHALL B J; (MCMI-I) MCMICHAEL D J; (PETE-I) PETERSON K
CYC 1
PI US 2003073155 A1 20030417 (200352)* 14p C12Q001-04 <--
ADT US 2003073155 A1 US 2001-977539 20011015
PRAI US 2001-977539 20011015
IC ICM **C12Q001-04**
AB US2003073155 A UPAB: 20030906
NOVELTY - Diagnostic testing (M1) comprises obtaining a first specimen and a second specimen; positioning the first and second specimen in a first and a second well (26, 28) of a carrier (22), respectively; and separating the first well from the second well of the carrier.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:
(1) diagnostic testing (M2) comprises:
(a) providing a carrier having a first and second well that are seperated, and a specimen handling tool disposed within at least a portion of the carrier;
(b) obtaining a first specimen and a second specimen; positioning the first and second specimen in a first and a second well (26, 28) of a carrier (22), respectively; and
(c) separating the first well from the second well of the carrier; and
(2) a method (M3) for conducting diagnostic testing comprising obtaining a first and second biopsy specimen, disposing of the first and second specimen in a first and second well of a carrier, and separating

the first and second wells.

USE - For determining the presence of **Helicobacter pylori** (claimed).

ADVANTAGE - The first well can be separated from the second the well, thus test for a particular bacteria may be disposed in the first well, while the second well may contain a composition, which test for a different bacteria.

DESCRIPTION OF DRAWING(S) - The figure is a perspective view of a system, carrier and specimen-handling tool.

Carrier 22

Specimen handling tool 24

First and second well 26, 28

Cavity 30

Elongated sides 38

Gap 48

Dwg.1/17

FS CPI

FA AB; GI

MC CPI: **B04-F10A**; **B11-C06**; **B11-C08C**; **B12-K04A**

TECH UPTX: 20030813

TECHNOLOGY FOCUS - INSTRUMENTATION AND TESTING - Preferred Method: The first and second specimens are subjected to a test. The second specimen is preserved for use in a subsequent test. A specimen handling tool (24) is disposed within a portion(s) of the carrier. The separator is disposed between the first and second well of the carrier. A composition that detects **Helicobacter pylori** is provided in the first and second well. (M2) and (M3) further comprises subjecting the first and second specimen to a test to determine the presence of **Helicobacter pylori.**

L51 ANSWER 6 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN **2003-466222** [44] WPIX

DNC **C2003-124319**

TI Apparatus for carrying out sample preparation and detection of panels of target nucleic acids and antigens in a sample, has sample preparation zone, three dimensional capture probe platforms and spacer elements.

DC B04 D16

IN COLLINS, M L

PA (NANO-N) NANOGEN INC

CYC 1

PI US 2003032029 A1 20030213 (200344)* 41p C12Q001-70 <--

ADT US 2003032029 A1 Cont of US 1998-217472 19981221, US 2002-96718 20020312

PRAI US 1998-217472 19981221; US 2002-96718 20020312

IC ICM **C12Q001-70**

ICS **C12M001-34**; **C12Q001-68**

AB US2003032029 A UPAB: 20030710

NOVELTY - An apparatus (I) for carrying out sample preparation and multiplex detection of panels of target nucleic acids and antigens in a sample, comprising a sample preparation zone, several three dimensional capture probe platforms for capturing specific classes of target molecules, and spacer elements for separating the sets of three dimensional capture probe platforms.

DETAILED DESCRIPTION - An apparatus (I) for carrying out sample preparation and multiplex detection of panels of target nucleic acids and antigens in a sample, comprises a sample preparation zone, several three dimensional capture probe platforms for capturing specific classes of target molecules, the three dimensional platforms further comprising sets of platforms, the sets are further physically separated from one another, and further having capture probes that are specific for capturing any one specific class of the target molecule, and spacer elements for separating the sets of three dimensional capture probe platforms, the sets and spacer elements further arranged so as to allow a sample to pass in succession

from one set through a spacer element to another set.

USE - (I) is useful for carrying out multiplex detection of panels of target nucleic acids and antigens in a sample, by providing a sample containing target nucleic acids and/or antigens of interest, treating the sample with a sample buffer to form a pre-processed sample, passing the pre-processes sample over (I), capturing the target nucleic acids and antigens by capture probes of (I), reacting a label with a signal probe, the signal probe having specificity for at least one other signal probe that is specific for the target and detecting the reacted level in any of (I) (claimed).

ADVANTAGE - (I) provides simple and efficient sample pre-processing and test methodology, as well as a simple and environmentally friendly detection methodology.

DESCRIPTION OF DRAWING(S) - The figure shows a five different formats for capturing and labeling nucleic acid targets.

Dwg.1/9

FS CPI

FA AB; GI; DCN

MC CPI: B04-B03C; B04-B04C; B04-E01; B04-E05; B04-F01; B04-N04; B11-C08E; B11-C08F2; B12-K04E; B12-K04F; D05-H04; D05-H05; D05-H06; D05-H07; D05-H08; **D05-H09**; D05-H12D1; D05-H18

TECH UPTX: 20030710

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Apparatus: The capture probe platforms are transparent to visible light transmission and the spacer elements are opaque to visible light transmission. The spacer elements have an outer surface that has a high reflective index. The capture probe platforms have attached to the number of oligonucleotides. The oligonucleotides have a base sequence that is unique for each of the sets of platforms. The panel is directed to the multiplex detection of nucleic acids and antigens derived from an infective agent selected from pathogenic microorganism, bacterium, protozoan, virus, fungus and prion. The capture probes of any given set of the sets are complementary to nucleic acid probes that are themselves complementary in part to nucleic acids derived from a the above microorganisms. The panel is directed to the multiplex detection of nucleic acids and antigens associated with a disease state selected from acquired immune deficiency, hepatitis, venereal diseases, respiratory disease, diarrheal illness, viral infection, bacterial infection, protozoan infection, heart disease and cancer. The capture probes of any given set of the sets are complementary to nucleic acids probes that are themselves complementary in part to nucleic acids of an organism selected from Salmonella sp., Escherichia coli strains, Shigella sp., **Campylobacter** sp., Listeria sp., Yersinia sp., Vibrio cholerae, Neisseria gonorrhea, Trichomonas, T.pallidum, Chlamydia, Candida, Giardia lamblia, Cryptosporidium, and total coliforms. The capture probes of any given set of the sets are complementary to nucleic acid probes that are themselves complementary in part to nucleic acids of a virus selected from the group consisting of rous sarcoma virus (RSV), human papillomavirus (HPV), herpes simplex virus (HSV), HIV, hepatitis C virus (HCV), HBV, HGV, HDV, HEV, human T-cell lymphotropic virus (HTLV)-1, and HTLV-2. The capture probes of any given set of the sets are complementary to nucleic acid sequences that are themselves attached to antibodies specific for antigens derived from the above mentioned viruses. The panel is directed to the multiplex detection of the above mentioned viruses or nucleic acids and/or antigens selected from the group consisting of HIV gag RNA, HIV envelope RNA, HIV polymerase RNA, HIV encoded proteins, immune cell derived molecules, cytomegalovirus, antigens or nucleic acids derived from the presence of Kaposi's sarcoma, drug metabolites, and antigens or nucleic acid derived from pneumocystis infection. The panel is directed to the multiplex detection of the above mentioned organisms. The panel is directed to the multiplex detection of hepatitis virus and associated clinical markers selected from hepatitis A, hepatitis B, hepatitis C, hepatitis D, hepatitis E, hepatitis G, ALT, AST and drug metabolites. The panel is directed to the multiplex detection of

sexually transmitted diseases caused by pathogenic agents selected from the above mentioned organisms. The multiplex detection of respiratory pathogens and/or resistance of such pathogens to anti-tuberculosis (TB) drugs selected from pneumonia causing bacteria, RSV, Mycobacterium africanum, M. bovis, M. microti, and M. tuberculosis. The apparatus further comprises the elements of a inert filter zone for filtering particulate material from a sample, a porous element zone for filtering small ionic materials from a sample, several zones comprising enzymes for carrying out digestions of sample-derived materials, a sample temperature adjustment zone, several re-circulation zones where a sample may be imported into the apparatus, the above elements further connected together in any sequence while a sample may pass from one element to another and to any further pass to the sets.

L51 ANSWER 7 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2003-147505 [14] WPIX
DNN N2003-116468 DNC C2003-038024
TI Device for determining the presence or absence of an analyte in a fluid sample, e.g., blood, serum, urine, comprises mobilization zone with detectable tracer molecule, sample application area, and primary and secondary capture areas.
DC B01 B04 D16 S03
IN BAUER, J S; HYATT, T P; WANG, H
PA (BAUE-I) BAUER J S; (HYAT-I) HYATT T P; (WANG-I) WANG H
CYC 1
PI US 2002142291 A1 20021003 (200314)* 24p C12M001-34 <--
ADT US 2002142291 A1 Provisional US 2000-197365P 20000414, Provisional US 2000-203696P 20000511, US 2001-835304 20010413
PRAI US 2001-835304 20010413; US 2000-197365P 20000414; US 2000-203696P 20000511
IC ICM **C12M001-34**
ICS C12M003-00; C12N005-06; C12N005-16; **C12Q001-70**; G01N033-53; G01N033-543
AB US2002142291 A UPAB: 20030227
NOVELTY - A new device for determining presence or absence of an analyte (a) in a fluid sample comprises:
(1) mobilization zone comprising a mobile/mobilizable detectable tracer molecule (DTM);
(2) sample application area (SA);
(3) primary capture area (c1) and secondary capture area (c2);
(4) (SA), (c1) and (c2) in fluid continuous contact; and
(5) during operation, (DTM) contacts (c1) after the sample contacts (c1).
DETAILED DESCRIPTION - A new device for determining presence or absence of an analyte (a) in a fluid sample comprises:
(1) a mobilization zone comprising a mobile or mobilizable detectable tracer molecule (DTM);
(2) a sample application area (SA);
(3) primary capture area (c1) and secondary capture area (c2) comprising a first and second immobilized binding partner respectively, both having a binding affinity for (a) and (DTM);
(4) (SA), (c1) and (c2) are in fluid continuous contact and the first immobilized binding partner has an equal or a lower apparent affinity for (a) than it has for (DTM); and
(5) during operation of the device, (DTM) contacts (c1) after the sample contacts (c1).
INDEPENDENT CLAIMS are also included for the following:
(1) Detection and/or quantitation (M1) of (a) in a fluid sample comprising:
(a) applying a liquid sample to a substrate along which the samples migrate sequentially to a primary capture area (c1) and secondary capture area (c2). (c1) binds the analyte with an equal or a lower apparent affinity than it binds a (DTM) and (c2) binds (DMT) with high affinity;

and

(b) reading a detectable signal from bound (DTM) in (c2).

(2) Detection and/or quantitation (M2) of (a) in a fluid sample comprises contacting the fluid sample with the device; and

(3) A test kit for the detection and/or the determination of an analyte in a sample containing the chromatographic assay device and instructions.

USE - To detect analytes in various types of fluid, including biological specimens (e.g. blood, serum, plasma, urine, saliva) (all claimed). To detect analytes in milk and environmental samples (preferably industrial plant effluent or natural fluids). Also for detection and/or quantitation of any known analyte with an appropriate analyte-specific antibody or other binding partner.

ADVANTAGE - The method is sensitive, rapid and single step and also quantify both large and small analytes at low concentrations (preferably ng/ml or less).

Dwg.0/6

FS CPI EPI

FA AB; DCN

MC CPI: B01-A02; B01-C04; B01-C05; B04-B04B1; B04-B04C; B04-B04D; B04-B04G; B04-B04K; B04-G01; B04-J01; B04-J02; B05-A01B; B06-D07; B07-D12; B08-D01; B10-B02E; B10-B04B; B10-D03; B11-C07A; **B12-K04A**; B12-K04E; **D05-H09**; D05-H11

EPI: S03-E14H4

TECH UPTX: 20030227

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Methods: (M1) additionally involves applying a (DTM). The detectable signal has an intensity, which correlates with the analyte in the sample. The first and second binding partners are immobilized on the substrate. (a) is applied to the device no earlier than the sample is applied to the device and additionally involves quantifying the amount of (a) in the sample. The analyte tracer conjugate is mixed with the sample prior to application to the sample application area. (M2) additionally involves providing an oral fluid sample combined with a bile acid or bile salt (0.1 - 1 wt.%) to reduce occurrence of false positives in the immunoassay and contacting a chelator of divalent cations with the oral fluid sample.
Preferred Component: The amount of (a) in the sample is proportional to the signal in the second capture area and the molecular weight is 100 - 1000 (preferably greater than 1000) Daltons. The sample is fluid sample selected from urine, blood, tears, sweat or saliva (preferably saliva) migrates along the test strip device by capillary action.

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Kit: The kit additionally comprises aliquot of analyte-tracer conjugate.
Preferred Components: The first and second immobilized binding partners are selected from antibodies, antigens and haptens. The reagent is at least one buffer, detergent or anticoagulants. The tracer molecule comprises an analyte molecule (preferably therapeutic drug, drugs of abuse and products of the metabolism of drugs of abuse (e.g. tetrahydrocannabinol, nicotine, cotinine, ethanol, theophylline, phenytoin, acetaminophen, lithium, diazepam, nortryptyline, secobarbital, phenobarbital, methamphetamine, fragments, mimetics, analogs or their derivatives), hormones (preferably testosterone, estradiol, estriol, 17-hydroxyprogesterone, progesterone, thyroxine, thyroid stimulating hormone, follicle stimulating hormone, luteinizing hormone, fragment, mimetics, analogs or their derivatives), antigens of infectious diseases, antibodies to antigens of infectious diseases, growth factors or haptens). The tracer molecule comprises a visually detectable label.
Preferred Method: The detectable tracer molecule is applied to the substrate before, after or simultaneously with the sample.

TECHNOLOGY FOCUS - BIOLOGY - Preferred Components: The first and second binding agents (preferably anti-analyte antibodies e.g. antibodies to HIV,

antibodies to HTLV, antibodies to **Helicobacter pylori**, antibodies to hepatitis, antibodies to measles, antibodies to mumps or antibodies to rubella) for the analyte are identical.

TECHNOLOGY FOCUS - INSTRUMENTATION AND TESTING - Preferred Device: The detectable tracer molecule is associated with the device in such a way that, during operation of the device, it contacts the primary capture area after a sample contacts the primary capture area. During operation of the device DTM migrates through the device at a rate slower than a rate at which the analyte in a sample migrates through the device due to a molecular weight of the tracer molecule (preferably a physical or temporal placement of the tracer molecule on the device). The tracer molecule is placed on the device after a sample is placed on the device. The device additionally contains at least on filter pad pretreated with at least one reagent to enhance the sensitivity of the assay device in a path flow of the fluid. The area of the secondary specific binding partner immobilized on the chromatographic medium is divided into at least two discrete and non-overlapping bands, with the quantity of the second specific binding partner in each band being such that the quantity of tracer molecule binding to (c2) and by correlation the amount of the analyte in a tested sample is indicated by the number of bands to which the tracer molecule binds.

ABEX UPTX: 20030227

EXAMPLE - Cotinine solution was prepared in a saliva matrix. A polyester test strip was prepared. To a mixture (0.25 ml) of dimethylformamide and pyridine was added trans-4-carboxycotinine , N-hydroxysuccinimide (5 mg) and 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide hydrochloride (15 mg). The mixture was rotated for 1 hour to form an active ester. A aliquot (50 microl) of the ester was added to BSA solution (1 ml) in phosphate buffer. The reaction mixture was rotated at room temperature for 4 hours and dialyzed to give BSA-cotinine conjugate. To carboxyl latex particles (1 ml) in phosphate buffer was added 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide (10 mg). The mixture was shaken for 20 minutes at room temperature. The activated latex particles were centrifuged and suspended in the conjugate (1 mg/ml). The mixture was worked up to give cotinine-tracer conjugate. The cotinine solution was added to sample well of each test strip and allowed to absorb for 10 - 30 seconds. The conjugate (20 microl) was added to the sample well and allowed to develop. The results showed that cotinine on strip at concentrations (ng/ml) of 10/50/100/200 as no test line/weak test line/strong test line/very strong test line.

L51 ANSWER 8 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **2002-316641** [36] WPIX
DNC **C2002-092185**
TI Microtiter plate for use in fluorescence analysis, e.g. for immunoassays, comprises upper plate with bores passing through it which fits on to lower plate with wells containing mobile filters.
DC A89 B04 D16 J04
IN POSCHEN, L; WILHELM, R
PA (KERJ) FORSCHUNGSZENTRUM JUELICH GMBH
CYC 3
PI DE 10035750 A1 20020207 (200236)* 9p C12M001-12 <--
GB 2365126 A 20020213 (200236) B01L003-00
NL 1018571 C2 20020129 (200236) B01L003-00
GB 2365126 B 20040218 (200413) B01L003-00
ADT DE 10035750 A1 DE 2000-10035750 20000722; GB 2365126 A GB 2001-17297 20010716; NL 1018571 C2 NL 2001-1018571 20010718; GB 2365126 B GB 2001-17297 20010716
PRAI DE 2000-10035750 20000722
IC ICM B01L003-00; **C12M001-12**
ICS B01L007-00; **C12M001-18**; **C12Q001-68**; G01N001-28; G01N033-53

AB DE 10035750 A UPAB: 20020610
NOVELTY - Microtiter plate for use in fluorescence analysis, comprising an upper plate (1) with bores (2) passing through it, is new. This fits on to a lower plate (3) with wells containing mobile filters (5). A pump is connected to the wells, either directly or via a base plate which is sealed on to the lower plate.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a filter system comprising individual filters (5) connected by straps (6).
USE - In purification of DNA samples, polymerase chain reaction (PCR) or immunoassays.
ADVANTAGE - Large numbers of samples containing a small amount of material can be processed under the same conditions. Direct optical analysis can be carried out.
DESCRIPTION OF DRAWING(S) - The drawings show plan views of the upper and lower straps.
Upper plate 1
Bore in upper plate 2
Lower plate 3
Filter 5
Connecting strap 6
Ring surrounding filter 7.
Dwg.1, 2/6
FS CPI
FA AB; GI; DCN
MC CPI: A12-L04B; B04-C02A; B04-C03B; B04-E01; B04-E05; B04-G01; B04-L04A; B05-A01B; B05-A03B; B05-B02C; B10-G03; B11-C07A; B11-C07A5; B11-C08E5; B12-K04; B12-K04F; D05-H09; D05-H11; D05-H12D1; D05-H18B; J04-B01B
TECH UPTX: 20020610
TECHNOLOGY FOCUS - POLYMERS - Preferred Apparatus: The plates are made from VA-steel coated with polytetrafluoroethylene or another plastic, glass, gold or a ceramic. The filters are made from polycarbonate, aluminum oxide or cellulose nitrate. The plate is fitted in a thermostatically controlled chamber. The filters are of the same diameter as the wells and are surrounded by a ring (7) of larger diameter. They have a pore size of 0.2 - 0.45 microns. The bores have the same diameter as the wells and the total volume of a single bore plus well is up to 300 microlitres. Eight filters are connected in a row by straps.
ABEX UPTX: 20020610
EXAMPLE - No relevant examples are given.

L51 ANSWER 9 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **2002-075542** [10] WPIX
DNC **C2002-022640**
TI Integrated active flux microfluidic devices for analyzing, e.g. nucleic acids, proteins and microorganisms.
DC B04 D16
IN CHOU, H; QUAKE, S R
PA (CALY) CALIFORNIA INST OF TECHNOLOGY
CYC 96
PI WO 2001094635 A2 20011213 (200210)* EN 176p C12Q001-68 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM EC EE ES FI GB GD GE HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001075340 A 20011217 (200225) C12Q001-68 <--
US 2002037499 A1 20020328 (200225) C12M001-18 <--
EP 1290226 A2 20030312 (200320) EN C12Q001-68 <--
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR
JP 2003536058 W 20031202 (200382) 200p G01N033-53

ADT WO 2001094635 A2 WO 2001-US18400 20010605; AU 2001075340 A AU 2001-75340 20010605; US 2002037499 A1 Provisional US 2000-209243P 20000605, Provisional US 2000-211309P 20000613, Provisional US 2000-249360P 20001116, CIP of US 2000-724548 20001128, US 2001-875438 20010605; EP 1290226 A2 EP 2001-942042 20010605, WO 2001-US18400 20010605; JP 2003536058 W WO 2001-US18400 20010605, JP 2002-502175 20010605

FDT AU 2001075340 A Based on WO 2001094635; EP 1290226 A2 Based on WO 2001094635; JP 2003536058 W Based on WO 2001094635

PRAI US 2000-724548 20001128; US 2000-209243P 20000605; US 2000-211309P 20000613; US 2000-249360P 20001116; US 2001-875438 20010605

IC ICM **C12M001-18**; **C12Q001-68**; G01N033-53

ICS B01J019-00; B01L003-00; B81B001-00; **C12M001-00**; **C12Q001-70**; G01N021-05; G01N021-64; G01N033-536; G01N033-543; G01N033-566; G01N033-58; G01N037-00

ICA C12N015-09

AB WO 200194635 A UPAB: 20020213

NOVELTY - A microfluidic device (MD) (I) comprising a loop channel (LC) communicating with at least 1 service channel (SC), a microvalve separating the LC from the SC and a pump associated with the LC, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a method (II) for mixing 2 or more different fluids in a MD, comprising:

(a) introducing the different fluids to the MD (I) so that each of the fluids is loaded into the loop channel; and

(b) activating the pump associated with the loop channel to mix the different fluids; and

(2) a method (III) for binding a sample to a target, comprising:

(a) introducing a fluid containing the sample to the MD (I) of the fluid is loaded into the loop channel; and

(b) activating the pump so that the fluid moves through the loop and the sample binds to the target molecules disposed in the loop as the fluid circulates through it.

USE - The MD may be used for the rapid detection of DNA, proteins or other molecules associated with disease.

ADVANTAGE - The devices and methods may be used for the simultaneous detection of several diseases by detecting molecules such as polynucleotides or proteins by measuring the signal of a detectable reporter associated with the molecules. Detection of the molecules may be correlated to a signal from an optically-detectable reporter associated with the bound molecules.

DESCRIPTION OF DRAWING(S) - A microfluidic device for analyzing e.g. polynucleotides and proteins.

Silicon microchip 22

Inlet 24

Outlets 26 and 28

Main channel 32

Detection region 36

Discrimination region 38

Branch channels 40 and 42

Manifolds 46

Reservoir 48

Leads 52 and 54

Dwg.1/24

FS CPI

FA AB; GI; DCN

MC CPI: B04-C01; B04-E01; B04-G01; B04-N04; B11-C07A; B11-C08E; B11-C09; B12-K04A; B12-K04E; B12-K04F; D05-H02; D05-H04; D05-H05; D05-H06; D05-H07; D05-H08; D05-H09; D05-H10; D05-H11; D05-H12; D05-H12D1; D05-J

TECH UPTX: 20020213

TECHNOLOGY FOCUS - INSTRUMENTATION AND TESTING - Preferred Device: The SC comprises at least 1 inlet and at least 1 outlet (which are separated from

the LC by a microvalve) and the LC receives fluid from the inlet channel. The device may further comprise a mixing channel in communication with a loop inlet channel. The pump is a peristaltic pump and preferably comprises at least 3 cooperating microvalves acting in the LC. The device preferably comprises a set of target molecules (TMs) (e.g. polynucleotide probes, protein probes or antibodies) disposed within the LC. The device further comprises a detection region (DR) coincident with at least a portion of the LC, and at least 1 detector associated with the DR. The LC is circular and resides in a layer of transparent isoelectric material and the valves are formed from an elastomeric membrane. The elastomeric layer is transparent and adjacent to a transparent substrate layer. The LC and SC reside in a treatment layer (TL) and the device further comprises a control layer (CL) adjacent to the TL and carrying control lines. The TL and CL are also elastomeric and are bonded to one another. Either the TL and/or the control layer is/are also transparent. The control lines comprise at least 1 channel which is carried by the CL and which intersects with at least 1 channel carried by the TL.

The intersection of the channel forms a microvalve comprising a deformable membrane between a treatment channel and a control channel. At least 3 control channels intersect the LC to form the peristaltic pump. The control channels are supplied with pressurized fluid (e.g. an aqueous liquid) and/or pressurized gas (e.g. air). The mixing channel is on the TL and also has at least 1 microvalve produced by an intersecting control channel on the CL. The target molecules are patterned on a surface of the LC. The patterned surface is a transparent substrate that seals at least part of the length of the loop channel. The pattern of target molecules coincides with a region examined by an optical detector. The target molecules may be labeled with a fluorescent reporter. The elastomeric material is molded silicon and the channels are formed by soft lithography. The LC preferably comprises at least 1 pair of interconnected parallel and antiparallel channels. The CL preferably comprises at least 3 parallel channels which intersect the channel(s) carried by the control layer.

Preferably, (I) is a microtiter plate with 96-1536 microtiter wells each of which comprises a target molecule patterned upon it and the microtiter plate is connected to the treatment layer so that at least a portion of the length of each loop channel is sealed by a microtiter well. (I) Preferably has 96-1536 target loops.

Preferred Methods: In (II), the MD has at least 1 inlet channel and at least 1 outlet channel and the fluids are loaded into the LC through the inlet channel. Preferably the different liquids are loaded via different inlet channels into the LC. Each inlet and outlet is separated from the LC by a microvalve which may be open or closed when the pump is activated. The fluids may comprise a solution or suspension of molecules (e.g. nucleic acids, polypeptides and antibodies or cells, virions, microscopic beads).

In (III), the target molecules are polynucleotide probes, protein probes antibody probes, biotin and avidin. The sample comprises nucleic acid molecules, protein molecules, cells, virions. The sample may comprise particles or molecules having a biotin specific label such as avidin or NeutrAvidin (RTM).

L51 ANSWER 10 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2002-017744 [02] WPIX
CR 2003-829571 [77]
DNC C2002-005189
TI Detecting microbial material in fluid samples, especially **campylobacter**, salmonella, Shigella or VTECs.
DC B04 D16
IN JONES, O P
PA (GWER-N) GWERNAFALAU CYF
CYC 96
PI WO 2001083810 A2 20011108 (200202)* EN 34p C12Q001-00 <--

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD
SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2001052437 A 20011112 (200222) C12Q001-00 <--
EP 1278887 A2 20030129 (200310) EN C12Q001-04 <--
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI TR

ADT WO 2001083810 A2 WO 2001-GB2045 20010508; AU 2001052437 A AU 2001-52437 20010508; EP 1278887 A2 EP 2001-925758 20010508, WO 2001-GB2045 20010508

FDT AU 2001052437 A Based on WO 2001083810; EP 1278887 A2 Based on WO 2001083810

PRAI GB 2000-10910 20000505

IC ICM **C12Q001-00**; **C12Q001-04**
ICS **C12M001-00**; **C12M001-10**

AB WO 200183810 A UPAB: 20031128
NOVELTY - A method (I) and apparatus ((II) and (III)) for detecting microbial material in fluid samples, are new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
(1) a method (I) of monitoring a microbial material in a fluid sample, comprising:
(a) providing a fluid sample for microbiological analysis;
(b) optionally selectively permitting multiplication of microbial material present in the fluid sample;
(c) permitting the microbial sample to enter a reaction chamber containing at least one capture system arranged to selectively capture the multiplied microbial material thereon;
(d) optionally washing the capture system having the microbial material captured on it; and
(e) monitoring the amount of the captured microbial material present on the capture system;
(2) a method (II) of monitoring two or more microbial materials present in a fluid sample, comprising:
(a) providing a fluid sample for microbiological analysis;
(b) optionally selectively permitting multiplication of microbial material present in the fluid sample;
(c) permitting the microbial sample to enter two or more reaction chambers, each reaction chamber containing at least one capture means arranged to selectively capture the microbial material on it;
(d) optionally washing the capture system having the multiplied microbial material captured on it; and
(e) monitoring the amount of the captured microbial material present on the capture means;
(3) apparatus (III) for use in monitoring a microbial material present in a fluid sample, comprising at least one reaction chamber arranged to receive capture system for selectively capturing microbial material contained in a fluid sample and a system for monitoring microbial material captured on the capture means;
(4) an analytical kit (IV) comprising a number of (III) arranged to be located on a carousel at a defined position, so that the carousel can be moved and each apparatus is presented to a succession of injection, vacuum sources, pressurised reagent dispersers and/or wash stations.
USE - The methods and apparatus are used for monitoring microbial content of fluid samples, especially foods for the presence of Enterobactereacea (**campylobacter**, salmonella, Shigella or VTECs).
Dwg.0/11

FS CPI

FA AB; DCN

MC CPI: B04-C03; B04-E01; B04-F01; B04-G01; B05-A03A; B11-C08E3; B11-C08E5;

B11-C09; B12-K04; D05-H04
TECH UPTX: 20020109
TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Methods: In (I) and (II) the microbial material includes verotoxin producing Escherichia coli, salmonella, **campylobacter**, mycobacterium, paratuberculosis, Shigella, Yersinia, Brucella, Vibrio, Aeromonas, Listeria, Clostridium difficile (toxin), verotoxins, giardia and criptospiridium. (I) And (II) further comprise repeating step (d) one or more times prior to step (e). 1 Or more antibiotic agents are added to the fluid sample. The antibiotic is added prior to step (e) (such as during step (b) or step (c)). An enrichment broth is also added to the fluid sample (preferably during step (b)). The enrichment both includes nutrients and/or an antibiotic agent. The methods according are performed at a predetermined temperature. The sample and the capture system are agitated, preferably by an alternating source of vacuum and pressure pulse. The capture system includes an antibody-coated substrate. The substrate comprises magnetic beads, plastics beads, microdots, sponges, gauze and membranes. The substrate is in uniform or random array. Monitoring of the captured microbial material is by ELISA or ATP analysis.
The capture means includes nucleic acid probes to capture upon it, specific nucleic acid strands for the microbial material being tested. The microbial material is multiplied utilizing PCR. The nucleic acid strands are detected using nucleic acid hybridization technique(s). The multiplication of the microbial material occurs in an enrichment zone and/or the reaction chamber. The sample is drawn from the sample receptacle to the enrichment zone and/or the reaction chamber as a controlled volume. The controlled volume is affected by vacuum suction. The sample is diluted (typically prior to selective multiplication) with buffered peptone water, hepes buffer (which may, if desired, include a wetting agent), an isotonic solution, or any solution capable of diluting the sample without destroying the target bacteria.
Preferred Apparatus: The capture system includes an antibody-coated substrate. The substrate includes magnetic beads, plastics beads, microdots (which may be arranged on a solid substrate), sponges, gauze and/or membranes. The magnetic beads are of ferromagnetic material, such as iron-filled polymer beads and the substrate is arranged in uniform or random array.
The capture system includes the inner surface of the reaction chamber and the system for monitoring the captured microbial material includes a spectrometer for measurement of luminescence, fluorescence or absorbency of colour, a radioactivity measuring device or a microscope for examination of the magnetic beads. The capture system includes nucleic acid strand capture system. The substrate is magnetic or plastic beads, microdots, sponges, gauze, mesh and membranes.
The nucleic acid strand capture system includes a DNA hybridisation probe. The detection system includes a system suitable for use in nucleic acid hybridization techniques. The apparatus further comprises an agitating system for agitating the contents of the reaction chamber. The agitation system includes the capture system, a solenoid-activated bar, or the interior configuration of the reaction chamber which preferably tapers from a first diameter portion to a second diameter portion in which the diameter of the second diameter portion is greater than the first diameter portion. The apparatus includes a sample receptacle which is preferably selectively connectable to, and removable from, the reaction chamber. The apparatus comprises a conduit or the like which is arranged to permit part of the sample to be transferred from the sample receptacle to the enrichment zone. The reaction chamber is typically in the form of an elongated conduit having a first open end in communication with the enrichment zone, and a second open end. The first open end is arranged so that, in use, it is immersed in the fluid sample, and/or the second open end, when in use, is above the surface of the liquid fluid sample. The reaction chamber includes an elongated conduit which is preferably U-shaped (the trough of the U being rounded, pointed or flat). The

elongated conduit may have an undulating appearance.
The apparatus includes a dilution zone provided with at least one entry port permitting entry of diluent into the apparatus, and control system arranged to draw a volume (which is typically pre-determined) of microbial material (typically from the enrichment -zone and/or the sample receptacle) into the reaction chamber. The reaction chamber includes a respective first end arranged to receive the sample and a second end arranged to receive the magnetic beads and, if relevant a washing substance. The apparatus has a vacuum source which, when in use, draws the sample into the reaction chamber, and subsequently, the sample and/or the magnetic beads out of the or each reaction chamber, if required.
The apparatus includes a pressure source which, when in use assists in the introduction of the coated substrate and the wash material into the reaction chamber. The enrichment zone has a greater internal volume than the (or each) reaction chamber. The apparatus further includes heating system which is typically controlled. The sample container is arranged in an overflow chamber so that if the sample overflows the overflow is collected in the overflow chamber.
(III) Is a self contained and/or sealed unit.
Preferred Kits: The further includes a drive system arranged to rotate the carousel. Each of the apparatus (III), when in use, is mounted about the periphery of the carousel. The kit further comprise a number of injection and/or analysis stations adjacent to th4 carousel and each station is capable of performing at least 1 step from (I).

ABEX UPTX: 20020109
SPECIFIC MICROORGANISMS - Specific Microorganisms: The microorganisms are Enterobacteraçea (**campylobacter**, salmonella, Shigella or VTECs).

EXAMPLE - No examples given.

L51 ANSWER 11 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2001-638471 [73] WPIX
CR 2001-483281 [52]; 2004-060190 [06]
DNN N2001-477218 DNC C2001-188818
TI New assay device, useful for detecting analytes (e.g. hormones, antibodies or other physiological substances) in a variety of biological samples, as well as for simultaneously analyzing a number of analytes using a single sample.
DC B04 D16 S03
IN CHEN, H Y; CHOW, T P; GUAN, M; MUN, P K; PEREIRA, A R
PA (CHEN-I) CHEN H Y; (CHOW-I) CHOW T P; (GUAN-I) GUAN M; (MUNP-I) MUN P K; (PERE-I) PEREIRA A R; (GENE-N) GENELABS DIAGNOSTICS PTE LTD
CYC 1
PI US 2001023076 A1 20010920 (200173)* 23p G01N033-558 <--
US 6617116 B2 20030909 (200361) C12M001-34 <--
ADT US 2001023076 A1 CIP of US 2000-493408 20000128, US 2001-771479 20010125;
US 6617116 B2 CIP of US 2000-493408 20000128, US 2001-771479 20010125
FDT US 6617116 B2 CIP of US 6316205
PRAI US 2001-771479 20010125; US 2000-493408 20000128
IC ICM **C12M001-34**; G01N033-558
ICS **C12Q001-70**; G01N021-00; G01N033-53; G01N033-543
AB US2001023076 A UPAB: 20040123
NOVELTY - An assay device or kit, is new. The device or kit comprises a chromatographic element having a sample receiving end, a reagent releasing end and a reaction zone, an absorbent pad, and a separator positioned between the chromatographic element and the absorbent pad.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for methods of detecting an analyte in a sample comprising employing the assay device or kit.
USE - The assay device and method are useful for detecting one or more analytes (e.g. hormones, antibodies or other physiological substances) in a variety of biological samples. In addition, the device can be used to simultaneously analyze a number of analytes using a single

sample.

ADVANTAGE - The assay device achieves greater sensitivity than conventional rapid test assays, leading to stronger and/or more stable visual signals than those produced by conventional devices, easier interpretation of results, and reduced occurrence of indeterminate results. The device can be used for detecting analytes in biological samples without need for conventional sample filtration techniques, and thus is suitable for use by untrained personnel without specialized equipment.

DESCRIPTION OF DRAWING(S) - The drawing represents a simple illustration of an assay device.

Assay device 2

Chromatographic element 4

Absorbent pad 6

Separator 8

Sample receiving end 10

Reagent releasing end 12

Reaction zone 14.

Dwg.1A/6

FS CPI EPI

FA AB; GI; DCN

MC CPI: B04-G01; B04-J01; B11-C08; B11-C08D2; **B12-K04A**; **D05-H09**; D05-H11

EPI: S03-E14H4

TECH UPTX: 20011211

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Device: The reagent releasing end comprises a releasable binding partner. The releasable binding partner comprises one or more antibodies directed against one or more conserved regions of a human antibody. The releasable binding partner comprises a detectable label. The sample receiving end comprises a first releasable binding partner, and the reagent releasing end comprises a second releasable binding partner. The reaction zone comprises an immobilized binding partner for a specific analyte. In particular, the immobilized binding partner comprises one or more antigens selected from a recombinant human immunodeficiency virus (HIV) 1 antigen, a recombinant HIV 2 antigen, a **Helicobacter pylori**-derived antigen and a Mycobacterium tuberculosis-derived antigen. The separator comprises a fluid-impermeable barrier, where the separator protrudes beyond the chromatographic element and the absorbent pad. The separator may also comprise a semi-permeable membrane or a material that dissolves over time upon exposure to an aqueous solution. The reaction zone comprises an immobilized first binding partner, and the reagent releasing end comprises a labeled releasable second binding partner. The sample receiving end may comprise a releasable first binding partner, the reaction zone comprises an immobilized second binding partner, and the reagent releasing zone comprises a labeled releasable third binding partner. The assay device or kit further comprises a casing surrounding at least a portion of the chromatographic element, absorbent pad and separator. Preferably, a portion of the separator protrudes from the casing. The assay device or kit further comprises an aqueous solution. The assay device or kit further comprises:

(a) a container for holding the chromatographic element, the separator, the absorbent pad, or combinations of these;

(b) packaging materials for packaging the chromatographic element, the separator, the absorbent pad or a combination of these; and

(c) an instruction set.

Preferred Method: The method comprises:

(a) adding the sample to the sample receiving end of the chromatographic element of the assay device or kit;

(b) allowing the sample to flow from the sample receiving end and through at least a portion of the reaction zone of the chromatographic element;

(c) reacting the analyte with a first binding partner immobilized within the reaction zone to form a complex;

(d) adding an aqueous solution to the reagent releasing end of the chromatographic element and solubilizing a releasable second binding partner incorporated in it, where the releasable second binding partner comprises a label;
(e) removing the separator from the assay device to bring the absorbent pad into contact with the chromatographic element;
(f) allowing the releasable second binding partner to flow from the reagent releasing end through at least the portion of the reaction zone of the chromatographic element;
(g) forming a second complex between the releasable second binding partner and a substrate selected from the group consisting of the analyte, the first binding partner, and the first complex; and
(h) detecting the second complex.
The method may also comprise:
(a) adding a sample to the sample receiving end of the chromatographic element of the assay device or kit;
(b) allowing the analyte to react with a releasable first binding partner incorporated in the sample receiving end, to form a first complex;
(c) allowing the first complex to flow from the sample receiving end and through at least a portion of the reaction zone of the chromatographic element;
(d) reacting the first complex with a second binding partner immobilized within the reaction zone to form a second complex;
(e) adding to the reagent releasing end of the chromatographic element an aqueous solution and solubilizing a releasable third binding partner incorporated in it;
(f) removing the separator from the assay device to bring the absorbent pad into the chromatographic element;
(g) allowing the releasable third binding partner to flow through at least the portion of the reaction zone;
(h) forming a third complex between the releasable third binding partner and a substrate selected from the analyte, the releasable first binding partner, the first complex and the second complex; and
(i) detecting the third complex.
The method may also comprise:
(a) adding the sample to the sample receiving end of the chromatographic element of the assay device or kit;
(b) allowing the sample to flow from the sample receiving end and through at least a portion of the reaction zone of the chromatographic element;
(c) reacting the analyte with a first binding partner immobilized within the reaction zone to form a complex;
(d) adding an aqueous solution to the reagent releasing end of the chromatographic element and solubilizing a releasable second binding partner incorporated in it, where the releasable second binding partner comprises a label;
(e) adding an aqueous solution to the reagent releasing end of the chromatographic element and solubilizing a releasable second binding partner and a labeled releasable third binding partner incorporated in it;
(f) binding the releasable second binding partner to the releasable third binding partner to form a second complex;
(g) allowing the second complex to flow from the reagent releasing end and through at least the portion of the reaction zone of the chromatographic element;
(h) forming a third complex between the first complex and the second complex; and
(i) detecting the third complex.
Adding the aqueous solution and solubilizing a releasable second or third binding partner is performed prior to removing the separator from the assay device. Removing the separator from the assay device is performed prior to the adding the aqueous solution and solubilizing a releasable second or third binding partner. Removing the separator from the assay device is performed concomitant with the adding the aqueous solution and solubilizing a releasable second or third binding partner. The separator

is removed by pulling the separator from between the chromatographic element and the absorbent pad. The separator is removed by permeabilizing the separator or by dissolving the separator. The analyte comprises an immunoglobulin (Ig)M, IgG, an antigen, an antibody, or both an antigen and an antibody.

ABEX UPTX: 20011211

EXAMPLE - Recombinant human immunodeficiency virus (HIV) 1 antigens p24 and gp41, and recombinant HIV 2 antigen gp36, were immobilized at a concentration of 0.08-0.3 mg/ml onto a nitrocellulose membrane. Protein A was immobilized in the same manner for use as an assay control line. The membrane was dried before addition of a blocking buffer. A reagent-bearing pad was prepared using a porous matrix. The pad was sprayed with goat anti-human immunoglobulin (Ig)G antibodies that were labeled with colloidal gold particles and dried. The assembly was cut into strips of 4 mm by 56 mm in size to form a chromatographic element having an untreated porous matrix at the sample receiving end, the reagent-bearing pad attached at the reagent releasing end, and the antigens immobilized in the reaction zone region. An assay device was assembled by placing an absorbent pad in the bottom half of a casing, then laying a separator above the absorbent pad, so that one edge of the separator extended from the casing. The chromatographic element was situated on top of the separator and the top half of the casing was attached. A serum sample was added to the sample receiving end of the chromatographic element via a first opening or window on the casing. The sample was allowed to migrate laterally and cover the reaction zone region of the membrane. Any human antibodies to the three HIV antigens present in the sample were bound to these antigens as the sample fluid crossed the region at which the antigens were bound to the nitrocellulose membrane. When the sample reached the indicator in the reaction zone after 1 minute, 3 drops of aqueous solution were added to a second opening in the casing above the reagent releasing end of the chromatographic element. Immediately after addition of the aqueous solution, the separator was removed from the assay device by pulling on the protruding end, allowing the chromatographic element and the absorbent pad to come into contact. The labeled goat anti-human IgG antibodies were then allowed to migrate across the reaction zone of the chromatographic element and bind to any human IgG antibodies immobilized in this region. The results were readable in 5 minutes through the opening in the casing. The results of this experiment clearly demonstrated the improved sensitivity of the present invention.

L51 ANSWER 12 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **2001-316430** [33] WPIX
DNC **C2001-097528**
TI Freeze-drying viable microorganisms in a multiwell container, useful for storing bacterial libraries at room temperature.
DC B04 D13 D16
IN REID, M
PA (GENE-N) GENETIX LTD
CYC 95
PI WO 2001032835 A1 20010510 (200133)* EN 20p C12N001-04
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001011573 A 20010514 (200149) C12N001-04
US 6322994 B1 20011127 (200175) C12Q001-02 <--
EP 1226229 A1 20020731 (200257) EN C12N001-04
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
EP 1226229 B1 20040128 (200410) EN C12N001-04
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

ADT WO 2001032835 A1 WO 2000-GB4205 20001102; AU 2001011573 A AU 2001-11573 20001102; US 6322994 B1 US 1999-433356 19991104; EP 1226229 A1 EP 2000-973017 20001102, WO 2000-GB4205 20001102; EP 1226229 B1 EP 2000-973017 20001102, WO 2000-GB4205 20001102
FDT AU 2001011573 A Based on WO 2001032835; EP 1226229 A1 Based on WO 2001032835; EP 1226229 B1 Based on WO 2001032835
PRAI US 1999-433356 19991104
IC ICM C12N001-04; **C12Q001-02**
ICS A01N001-00; **C12M001-00**; **C12M001-18**
AB WO 200132835 A UPAB: 20010615
NOVELTY - Freeze-drying many samples of viable microorganisms (A) by dispensing the liquid samples into separate wells of a container, placing the container in a freeze-drying apparatus and freeze-drying under conditions that maintain viability.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a multiple-well container having a viable freeze-dried sample of (A) in each well.

USE - The method is particularly used to store libraries, optionally (partially) pre-selected, of bacteria (preferred), yeast, fungi, animal or plant cells, produced by cloning techniques, for subsequent screening.

ADVANTAGE - The container can be stored and used at room temperature, so provides storage of many different (A) in an easily accessible format that does not require expensive freezer space. Samples are stored in individual wells without cross-contamination and room temperature storage is more compatible with screening in automated instruments.

Dwg.0/2
FS CPI
FA AB; DCN
MC CPI: **B04-F10**; B04-F10A3; **B11-C06**; B11-C08; B11-C08E1; B12-K04E; D03-H02A; D05-H02; D05-H09
TECH UPTX: 20010615
TECHNOLOGY FOCUS - BIOLOGY - Preferred Process: The samples include an excipient, specifically lactose, sucrose or trehalose. Particularly (A) have been grown in a culture medium that contains the excipient and freeze-dried in this medium.
Preferred Container: The container is a microtiter plate and is fitted with a sterile seal for each well, particularly one that allows removal of a portion of the sample, particularly a rubber seal.
ABEX UPTX: 20010615
EXAMPLE - Escherichia coli JM109, transformed with pUC18/19, were grown on LB (Luria Bertani) broth containing 50 micrograms/ml ampicillin, then pelleted by centrifugation, resuspended in LB broth containing 10% trehalose and 0.25% glycerol and distributed among the wells of a 384-well plate. The plates were frozen at -80 degrees Celsius, freeze-dried, then stored at 4 degrees Celsius in sealed bags for 17 days. The cultures were then rehydrated and serially diluted in ampicillin-containing LB broth to determine viable cells. Viability was 78.5%, compared with 0% when the trehalose/glycerol excipient was replaced by 10% poly(vinyl pyrrolidone) and 0.25% glycerol.

L51 ANSWER 13 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1999-469832** [40] WPIX
CR 2000-304365 [26]
DNN **N1999-350828** DNC **C1999-138066**
TI Device for simultaneously testing many materials for antimicrobial activity or antigen adhesion, particularly materials used for medical equipment.
DC B04 D16 J04 S03
IN BECHERT, T; STEINRUECKE, P
PA (BECH-I) BECHERT T; (STEI-I) STEINRUECKE P
CYC 1
PI DE 19751581 A1 19990826 (199940)* 15p C12M001-34 <--
DE 19751581 C2 20020508 (200233) C12M001-34 <--

ADT DE 19751581 A1 DE 1997-19751581 19971120; DE 19751581 C2 DE 1997-19751581 19971120
FDT DE 19751581 C2 Div in DE 19758598
PRAI DE 1997-19751581 19971120
IC ICM **C12M001-34**
ICS **C12M001-18**; **C12Q001-18**; G01N021-17; G01N033-535; G01N033-543

AB DE 19751581 A UPAB: 20020524
NOVELTY - Device (A) comprises part (1) with many samples for testing, having equal sizes, attached to it, and second part (2) with many depression of equal size. The samples are arranged so that they are aligned with the centers of the depressions and the dimensions of samples and depressions are matched.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (a) method for testing materials for antimicrobial activity by (i) preparing samples of defined geometry and size, (ii) incubating samples with solution of test microbe, (iii) transferring the samples to a minimal medium suitable for the microbe, (iva) transferring samples to a nutrient medium suitable for the microbe, (va) determining the optical density (OD) of the nutrient solution after removal of the sample, (ivb) removing the sample and adding 1-1/100 volume parts complete medium to the minimal medium and (vb) time-resolved measurement of the OD of the medium; and (b) method for quantifying adhesion of antigens (Ag) to test materials by (i) as above, (ii) incubating samples with a solution containing (Ag), (iii) transferring samples sequentially to blocking solution, serum solution, enzyme-containing solution and enzyme substrate solution, then (iv) photometric measurement of the substrate solution after removal of the sample.

ACTIVITY - Antimicrobial.

MECHANISM OF ACTION - None given.

USE - (A) is used to screen materials, especially optionally pretreated biomaterials, for antimicrobial activity and to quantify adhesion (particularly of antigens but also proteins, nucleic acids, algae, chemicals etc.) to these materials. The materials are e.g. those used for prostheses, catheters and other medical equipment, but may also be those used in brewing, toys, kitchen or bathroom products, pharmaceuticals (ointments and lotions), surface coatings, detergents etc.

ADVANTAGE - (A) allows simultaneous examination of many samples under identical conditions and provides quantitative results. It provides reproducible results quickly and inexpensively; is highly sensitive, and suitable for automation and photometric evaluation.

Dwg.0/7

FS CPI EPI
FA AB; DCN
MC CPI: B04-B04C; B04-E01; B04-F08; **B04-F09**; B04-L01; B11-C04A; B11-C04B; B12-K04; D05-H09; J04-B01
EPI: S03-E04; S03-E14H4

TECH UPTX: 19991004

TECHNOLOGY FOCUS - INSTRUMENTATION AND TESTING - Preferred device: When parts (1) and (2) are assembled, a space (particularly smaller than half the depth of the depression) is left between the base of the depression and the sample, and this space serves as an incubation chamber. Test sample are particularly cylindrical and the maximum cross-section of the sample is not over half the diameter of the depression. Samples are particularly glued on to (1). Especially (2) is a microtiter plate and (1) a matching cover. Preferred process: In method (a), the minimal medium in step (iii) may include 1-1/2000 of complete medium (to increase sensitivity, allowing very low levels of antimicrobial activity to be detected). In both methods (a) and (b), many samples are tested simultaneously, with results evaluated using an EDV(not defined)-controlled microplate reader.

ABEX UPTX: 19991004

EXAMPLE - Samples (cylinders 1.1. cm long and 2 mm in diameter) of

catheter material were glued to a microtiter plate cover (aligned with the plate wells), then incubated for 60 min at 37degreesC in a suspension containing 108 log-phase cells/ml in complete medium. The samples were then removed, placed in microtiter wells filled with minimal medium and after 24 hr at 37degreesC, removed, washed and placed in microtiter wells containing sterile complete medium. After a further 24 hr incubation, the samples were removed and optical density (OD) in the wells measured (end-point measurement at 578 nm). For six commercial polyurethane samples, bacterial proliferation was detected with mean OD 0.537, standard deviation 0.122. For six similar samples that included silver, the mean OD was -0.001 with standard deviation 0.002.

L51 ANSWER 14 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1999-264036** [22] WPIX
DNN **N1999-196673** DNC **C1999-077938**
TI New multicompartment assay device comprises selectively sustaining growth of target microbial organism and antimicrobial susceptibility especially detecting urinary tract infections.
DC B04 C06 D16 J04 S03
IN CARPENTER, C R; CHEN, C; GU, H; NAQUI, A
PA (IDEX-N) IDEXX LAB INC; (CARP-I) CARPENTER C R; (CHEN-I) CHEN C; (GUHH-I) GU H; (NAQU-I) NAQUI A
CYC 84
PI WO 9918232 A1 19990415 (199922)* EN 40p C12Q001-08 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
AU 9895879 A 19990427 (199936)
EP 1017844 A1 20000712 (200036) EN C12Q001-08 <--
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
JP 2001519167 W 20011023 (200202) 37p C12Q001-08 <--
US 2002076742 A1 20020620 (200244) C12Q001-18 <--
AU 752133 B 20020905 (200264) C12Q001-08 <--
ADT WO 9918232 A1 WO 1998-US20298 19980929; AU 9895879 A AU 1998-95879 19980929; EP 1017844 A1 EP 1998-949584 19980929, WO 1998-US20298 19980929; JP 2001519167 W WO 1998-US20298 19980929, JP 2000-515025 19980929; US 2002076742 A1 US 1997-942369 19971002; AU 752133 B AU 1998-95879 19980929
FDT AU 9895879 A Based on WO 9918232; EP 1017844 A1 Based on WO 9918232; JP 2001519167 W Based on WO 9918232; AU 752133 B Previous Publ. AU 9895879, Based on WO 9918232
PRAI US 1997-942369 19971002
IC ICM **C12Q001-08**; **C12Q001-18**
ICS A01N037-18; **C12M001-18**; **C12Q001-00**; **C12Q001-04**; **C12Q001-20**; G01N021-63; G01N033-15
AB WO 9918232 A UPAB: 20021105
NOVELTY - The multicompartment assay comprises:
(a) at least one compartment comprising a viable organism control medium capable of sustaining growth of total microbial organisms;
(b) at least one compartment comprising a medium capable of selectively sustaining growth of target microbial organisms; and
(c) at least one compartment comprising an antimicrobial susceptibility interpretation medium.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for detecting the presence of target microbial microorganisms in a biological sample and of simultaneously determining the susceptibility of such microorganisms to antimicrobial agents comprising:
(a) providing a multicompartment assay (as above); and
(b) placing a portion of the biological sample respectively in at least one of the compartments comprising a medium capable of sustaining growth of target microbial organisms and at least one compartment

comprising an antimicrobial susceptibility interpretation edium comprising an antimicrobial agent. Growth of organisms in at least one compartment comprising a medium capable of sustaining growth of total microbial organisms indicates the presence of bacteria in a sample and growth of organisms in at least one compartment comprising a medium capable of sustaining growth of target microbial organisms indicating the presence of target microbial organisms in at least one compartment comprising an antimicrobial susceptibility interpretation medium indicating that the organisms lack susceptibility to that antimicrobial agent.

USE - The device is useful for detecting target microorganisms in a biological sample and determining the susceptibility of such microorganisms to antimicrobial agents especially for the detection of urinary tract infections, skin infections and/or ear infections in humans and/or for veterinary use.

ADVANTAGE - The method is an improvement for determining effective antibacterial therapy in a single step.

Dwg.0/0

FS CPI EPI

FA AB; DCN

MC CPI: B04-B04B1; B04-B04D4; B04-B04D5; B04-B04G; B04-B04L; **B04-F10** ; B04-L01; **B11-C08C**; B11-C08E; B11-C09; B12-K04A4; C04-B04B1; C04-B04D4; C04-B04D5; C04-B04G; C04-B04L; **C04-F10** ; C04-L01; **C11-C08C**; C11-C08E; C11-C09; C12-K04A4; D05-H02; D05-H09; J04-B01

EPI: S03-E04D

TECH UPTX: 19990609

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Device: The medium capable of sustaining growth of total microbial organisms comprises a total viable bacteria medium where the target microbial organisms are bacteria and the antimicrobial susceptibility interpretation medium comprises an antibiotic or a total viable fungi medium where the target microbial organisms are fungi and the antimicrobial susceptibility interpretation medium comprises an antifungal agent.

The medium capable of sustaining growth of total microbial organisms comprises a means for detecting total microbial organisms.

The detection means comprises:

(i) an enzyme substrate comprising a detectable moiety capable of being released from the substrate by action of a microbial enzyme; or

(ii) a signal generating substrate comprising a detectable moiety capable of being released from the substrate by action of a microbial enzyme (especially comprising a detectable moiety capable of being released from the substrate by action of a microbial enzyme).

Each of the media comprises a means for producing an identical type of detectable signal. At least one antimicrobial susceptibility interpretation medium comprises amoxicillin, clavulanic acid/amoxicillin or enrofloxacin.

Preferred Method: The biological sample is urine, blood, saliva, cerebrospinal fluid, fluid from a wound, a chemical sample or an environmental sample. The target microbial microorganisms are urpathogens (especially comprising Enterobacteriacae especially E. coli, Klebsiella spp., Enterobacter spp., Proteus mirabilis, Proteius vulgaris, Morganella morganii, Providencia retteri, Acineobacter spp., Staphylococcus aureus, Enterococcus faecalis, or Streptococci.

ABEX UPTX: 19990609

EXAMPLE - The media was formulated using standard techniques comprising UTI media with enrofloxacin (ENR) at 2.0 mg/l. A total of 303 feline and canine urine specimens were collected from the animals suspected of having urinary tract infection and were tested with the ENR medium.

A 50 microlitre aliquot of the urine specimen was added to 10 ml sterile saline solution (0.85% NaCl). A 100 microlitre of the diluted urine specimens were added to the ENR medium in the urinary tract infection device and the device was then incubated at 35 degreesC for 24 hours. For comparison a traditional microbiological culture, bacteria

identification technique and antimicrobial susceptibility test were performed. A portion of 1 microlitre urine specimen was streaked onto blood agar plate which was then incubated at 35 degreesC for 24-48 hours. The positive culture was then subcultured and subjected to biochemical identification to obtain the identity of the isolated culture. The susceptibility of the ENR of the gram negative urinary pathogens were performed using standard Kirby-Bauer antimicrobial susceptibility assay.

L51 ANSWER 15 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1999-153812** [13] WPIX
CR 2000-087345 [07]; 2000-087375 [07]; 2000-087488 [07]; 2000-097643 [08]; 2000-097644 [08]; 2000-106021 [09]; 2000-136895 [12]; 2000-514683 [46]
DNC **C1999-045539**
TI Detection and enumeration of microorganisms in liquid test samples - using incubating techniques on multiple microvolumes of the test sample.
DC B04 D16 J04
IN BENTSEN, J G; BERG, J G; CALHOUN, C D; HALVERSON, K J; HUNTLEY, D A; JOHNSTON, R P; KREJCAREK, G E; QIU, J; WEI, A; WILLIAMS, M G
PA (MINN) MINNESOTA MINING & MFG CO; (MINN) 3M INNOVATIVE PROPERTIES CO
CYC 82
PI WO 9906589 A1 19990211 (199913)* EN 45p C12Q001-02 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
AU 9885957 A 19990222 (199927)
EP 1000169 A1 20000517 (200028) EN
R: BE DE DK ES FR GB IT NL SE
BR 9810844 A 20000725 (200043)
JP 2001512031 W 20010821 (200155) 51p C12Q001-08 <--
MX 2000000953 A1 20010901 (200239) C12Q001-02 <--
US 6696286 B1 20040224 (200415) C12M001-34 <--
ADT WO 9906589 A1 WO 1998-US15575 19980727; AU 9885957 A AU 1998-85957 19980727; EP 1000169 A1 EP 1998-937185 19980727, WO 1998-US15575 19980727; BR 9810844 A BR 1998-10844 19980727, WO 1998-US15575 19980727; JP 2001512031 W WO 1998-US15575 19980727, JP 2000-505329 19980727; MX 2000000953 A1 MX 2000-953 20000127; US 6696286 B1 CIP of US 1997-838552 19970409, Div ex US 1997-905481 19970801, US 2000-495092 20000201
FDT AU 9885957 A Based on WO 9906589; EP 1000169 A1 Based on WO 9906589; BR 9810844 A Based on WO 9906589; JP 2001512031 W Based on WO 9906589
PRAI US 1997-905481 19970801; US 1997-838552 19970409; US 2000-495092 20000201
IC ICM **C12M001-34**; **C12Q001-02**; **C12Q001-08**
ICS B01L003-00; **C12M001-18**
AB WO 9906589 A UPAB: 20040302
A liquid test sample is distributed in microvolumes into a number of microcompartments(18,20) of a culture device(16). The device(16) is then incubated for a time period of at least one cell division cycle. The presence or absence of micro-organisms in each of the microcompartments is then checked.

USE - To give rapid and effective detection and enumeration of micro-organisms in liquid test samples.

ADVANTAGE - The use of microvolumes gives multiple test samples for rapid detection and enumeration with reduced 95% confidence limits for the test results.

Dwg.2/8
FS CPI
FA AB; GI
MC CPI: B11-A; **B11-C06**; B12-K04A; D05-H02; D05-H09; J04-C04

L51 ANSWER 16 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1997-549338** [50] WPIX
DNC **C1997-175120**
TI Screening for microorganisms having identifiable characteristic, especially mutant enzyme expression - by growing mixed population in individual compartments containing selective medium.
DC B04 D16
IN SCHELLENBERGER, V
PA (GEMV) GENENCOR INT INC
CYC 29
PI WO 9737036 A1 19971009 (199750)* EN 23p C12Q001-08 <--
RW: AT BE CH DE DK EA ES FI FR GB GR IE IT LU MC NL PT SE
W: AU BR CA CN FI JP KR MX NO NZ
AU 9720520 A 19971022 (199808) C12Q001-08 <--
EP 892853 A1 19990127 (199909) EN C12Q001-08 <--
R: AT BE CH DE DK ES FI FR GB LI NL
US 6001586 A 19991214 (200005) C12Q001-04 <--
AU 731935 B 20010405 (200125) C12Q001-08 <--
ADT WO 9737036 A1 WO 1997-US2527 19970217; AU 9720520 A AU 1997-20520 19970217; EP 892853 A1 EP 1997-908668 19970217, WO 1997-US2527 19970217; US 6001586 A US 1996-625488 19960329; AU 731935 B AU 1997-20520 19970217
FDT AU 9720520 A Based on WO 9737036; EP 892853 A1 Based on WO 9737036; AU 731935 B Previous Publ. AU 9720520, Based on WO 9737036
PRAI US 1996-625488 19960329
REP EP 181075; GB 2094831; US 3902972; US 3960658
IC ICM **C12Q001-04**; **C12Q001-08**
ICS **C12M001-18**; **C12M001-22**; **C12M001-32**; **C12Q001-02**; **C12Q001-20**; **C12Q001-54**
AB WO 9737036 A UPAB: 19971217
Screening of microorganisms having a selectable characteristic comprises: (a) inoculating a growth medium that (by addition or lack of a particular nutrient or metabolite) favours growth of organisms with the specified characteristic over growth of those without, with various microorganisms; (b) placing inoculated medium in a growth chamber having separate compartments, forming a barrier that prevents diffusion of metabolites from one compartment to the others, so that microorganisms are randomly distributed among the compartments; (c) incubating the chamber so that organisms with and without the specified characteristic can be distinguished, and (d) selecting organisms with the specified characteristic.

When the cells are randomly distributed, at least 25%, particularly practically all, of the compartments contain only one organism. Each compartment has volume 0.0001-1 ml (particularly 0.05-1 mu l). The selectable property is particularly expression of mutant enzyme having altered substrate specificity, specific activity, temperature/activity or pH/activity profile, activity or stability in presence of surfactants, solvents or other solutes. The enzymes are e.g. hydrolases, oxidoreductases, transferases, lyases or ligases, particularly protease, lipase, amylase, beta -galactosidase, cellulase, hemicellulase, etc. The microorganisms have been mutated before inoculation of the medium.

USE - The method is particularly used to detect, amplify and isolate random mutants (of bacteria, filamentous fungi or yeast) that produce an extracellular enzyme with altered activity, performance or stability.

ADVANTAGE - The method is simple, rapid and accurate, allowing isolation of required mutants from a population of up to 1 million organisms without nutrient cross-over.

Dwg.2/3
FS CPI
FA AB; GI
MC CPI: **B04-F09**; **B04-F10**; B04-L01; B11-C08E1; B12-K04A4; D05-A02; D05-H03; D05-H04; D05-H05

L51 ANSWER 17 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1997-470557 [43] WPIX
DNN **N1997-392595** DNC **C1997-149501**
TI Test system for potential plant protection chemicals - has bar code identification of test samples and substances and recessed carrier plate for the samples with nutrients and sprays for the test chemicals at each recess.
DC C07 D16 S03
IN DANIGEL, H; KESSMANN, H; KLOKOW, G; MENTZEN, J; OBERGFELL, P; KESSAMANN, H
PA (NOVS) NOVARTIS AG; (SYGN) SYNGENTA PARTICIPATIONS AG; (NOVS) NOVARTIS-ERFINDUNGEN VERWALTS GMBH; (DANI-I) DANIGEL H; (KESS-I) KESSMANN H; (KLOK-I) KLOKOW G; (MENT-I) MENTZEN J; (OBER-I) OBERGFELL P; (SYGN) SYNGENTA CROP PROTECTION INC
CYC 68
PI WO 9733179 A1 19970912 (199743)* DE 37p G01N035-00
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG
W: AL AU BA BB BG BR CA CN CU CZ EE GE HU IL IS JP KP KR LC LK LR LT LV MG MK MN MX NO NZ PL RO SG SI SK TR TT UA US UZ VN YU
AU 9720230 A 19970922 (199804) G01N035-00
EP 885395 A1 19981223 (199904) DE G01N035-00
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE
BR 9707942 A 19990727 (199941) G01N035-00
AU 714880 B 20000113 (200014) G01N035-00
JP 2000506268 W 20000523 (200033) 40p G01N033-15
MX 9807219 A1 19990101 (200051) G01N035-00
KR 99087414 A 19991227 (200059) G01N035-00
EP 885395 B1 20010711 (200140) DE G01N035-00
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE
DE 59704014 G 20010816 (200148) G01N035-00
US 6277642 B1 20010821 (200150) G01N035-00
IL 125861 A 20011223 (200216) G01N033-00
US 2002110920 A1 20020815 (200256) G01N035-00
US 6613542 B2 20030902 (200359) C12Q001-02 <--
ADT WO 9733179 A1 WO 1997-EP985 19970228; AU 9720230 A AU 1997-20230 19970228; EP 885395 A1 EP 1997-908155 19970228, WO 1997-EP985 19970228; BR 9707942 A BR 1997-7942 19970228, WO 1997-EP985 19970228; AU 714880 B AU 1997-20230 19970228; JP 2000506268 W JP 1997-531427 19970228, WO 1997-EP985 19970228; MX 9807219 A1 MX 1998-7219 19980904; KR 99087414 A WO 1997-EP985 19970228, KR 1998-706831 19980831; EP 885395 B1 EP 1997-908155 19970228, WO 1997-EP985 19970228; DE 59704014 G DE 1997-504014 19970228, EP 1997-908155 19970228, WO 1997-EP985 19970228; US 6277642 B1 WO 1997-EP985 19970228, US 1999-117968 19990216; IL 125861 A IL 1997-125861 19970228; US 2002110920 A1 Div ex US 1999-117968 19990216, US 2002-881072 20020411; US 6613542 B2 Div ex WO 1997-EP985 19970228, Div ex US 1999-117968 19990216, US 2001-881072 20010614
FDT AU 9720230 A Based on WO 9733179; EP 885395 A1 Based on WO 9733179; BR 9707942 A Based on WO 9733179; AU 714880 B Previous Publ. AU 9720230, Based on WO 9733179; JP 2000506268 W Based on WO 9733179; KR 99087414 A Based on WO 9733179; EP 885395 B1 Based on WO 9733179; DE 59704014 G Based on EP 885395, Based on WO 9733179; US 6277642 B1 Based on WO 9733179; IL 125861 A Based on WO 9733179; US 2002110920 A1 Div ex US 6277642; US 6613542 B2 Div ex US 6277642
PRAI EP 1996-810124 19960305
REP EP 323205; WO 8604919
IC ICM **C12Q001-02**; G01N033-00; G01N033-15; G01N035-00
ICS C12M003-00; **C12Q001-00**; G01N033-48
AB WO 9733179 A UPAB: 20031105
A system for testing chemical material, or their mixtures, for effectiveness in plant protection applications identifies the sample materials by a machine readable code (BC1,BC2) to be stored in memory (12). The samples are prepared in a test plate (30) so that the sample or a part-sample (BR) is placed in each recess (300) containing a nutrient (301) or a gel partially filling it, for all the recesses. A spray

(150,151) is either directly over the plate recess (300), or immersed in it, to spray the test sample with the selected substance.

The test samples and the test substances are identified by a machine readable code (BC1,BC2) to be stored in memory (12). The sample is passed into a stamper (2) to give sheet discs (BR) of the sample automatically. It is held for positioning in the plate (30) recess (300 at least partially filled with a nutrient (301) or a gel. A store (5) holds a number of carrier plates (30) charged with samples before spraying. Several concentrations of the substances or mixtures are prepared in a store (8), for charging each recess in the carrier plates, and a mixer (13) prepares the selected substances for each plate recess, with an auxiliary mixer (11), for delivery to the sprays (150,151). The spray assembly (150,151) is a tuyere stock (150) with a sealing ring (152) which gives a firm sealing when the jet (151) is inserted into the plate (30) recess (300).

USE - The system is especially suitable for the testing potential pesticides, herbicides, fungicides, acaricides, nematocides or insecticides.

ADVANTAGE - The system gives a high throughput of materials to be tested and test samples. At the same time, it gives a reliable identification and classification of the samples and test substances, without any contamination of adjacent samples. The operation can be highly automated for increased efficiency, and can be allowed to work overnight without supervision.

Dwg.1,6/9

FS CPI EPI
FA AB; GI
MC CPI: **C11-C06**; **C11-C08C**; C12-K04E; D05-H09
EPI: S03-E15

L51 ANSWER 18 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1997-206618** [19] WPIX
DNC **C1997-066310**
TI Multi-well osteocyte culture device for diagnosing osteocyte diseases - has multi-chamber unit with open end sealed to flat base part having sintered calcium phosphate film.
DC B04 D16
IN PUGH, S M; SMITH, T J N
PA (MILL-N) MILLENIUM BIOLOGIX INC
CYC 2
PI JP 09056369 A 19970304 (199719)* 10p C12M001-18 <--
US 5861306 A 19990119 (199911) C12M003-00
ADT JP 09056369 A JP 1995-350164 19951222; US 5861306 A Cont of US 1995-518912 19950824, US 1997-847889 19970428
PRAI US 1995-518912 19950824; US 1997-847889 19970428
IC ICM **C12M001-18**; C12M003-00
ICS **C12M001-34**; **C12Q001-06**; **C12Q001-20**
ICA C12N005-06
AB JP 09056369 A UPAB: 19970512
Device includes flat base part (12) having sintered calcium phosphate film provided on one side and multi-chamber unit having one end opened arranged above film. Multi-chamber unit is sealed to base part having the coated film by sealing means to form individual housing wells. Using same film surface of calcium phosphate, osteoblast and osteoclast can be cultured at same time. for example, in 3 adjacent wells, osteoclast, osteoblast, and proper reference cells can be cultured, respectively. Thus, it is possible to compare functions of osteoblast and osteoclast under the same conditions.

USE - Used to analyse functions of osteocyte for diagnosing osteocyte diseases and for developing chemical to change the activity of osteocyte.

Dwg.0/11

FS CPI
FA AB

MC CPI: B04-F01; B11-C08E1; B12-K04; D05-H02; D05-H08; D05-H09

L51 ANSWER 19 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1997-081097** [08] WPIX
DNN **N1997-067174** DNC **C1997-025934**
TI A cell culture multi-well plate - without anchor dependency comprises e.g. methacrylate coated wells.
DC A89 B04 D16 S03
PA (NIPK) NIPPON KAYAKU KK; (UEHA-I) UEHARA Y
CYC 1
PI JP 08322593 A 19961210 (199708)* 19p C12Q001-06 <--
ADT JP 08322593 A JP 1995-161517 19950605
PRAI JP 1995-161517 19950605
IC ICM **C12Q001-06**
ICS **C12M001-18**; **C12M001-34**; C12M003-04; C12N005-02; G01N033-52
AB JP 08322593 A UPAB: 19970220
A cell culture multi-well plate for cells without anchor dependency comprises polymethacrylate, partic. poly(hydroxyalkyl) methacrylate, especially poly(2-hydroxymethyl)methacrylate, coated wells, partic. for selective multiplication of the cells, and a culture method using the multi-well plate, and a method for quantitative determn. of the growth rate of cells without anchor dependency, partic. by uptake of tritium thymidine, tetrazolium reduction or colorimetric method. Multi-well cell culture plates are coated with polymethacrylate (e.g. poly(hydroxy-loweralkyl) methacrylate, esp,. poly(2-hydroxymethyl)methacrylate) with polymerisation degree of 50-100,000, pref. 100-10,000 to give thickness of 0.002-50, pref. 0.01-40 micron. Cells are cultured at 20-45, pref. 35-40 deg.C and the growth rate was determined by the claimed procedures.
ADVANTAGE - Simple culture and quantitative determn. of transformed cells without anchor dependency.
In an example, in a 95% EtOH solution poly(2-hydroxyethyl)methacrylate was dissolved to make 5 mg/ml solution and poured in a multi-well plate at a rate of 50 micro L/well and dried at 37 deg.C for 2 days to give the multi-well cell culture plate.
Dwg.4/22
FS CPI EPI
FA AB; GI; DCN
MC CPI: A04-F06E; A12-W11L; B04-C03B; B04-F01; B11-C07A; B12-K04A; D05-H02; D05-H09
EPI: S03-E14H

L51 ANSWER 20 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1997-052357** [05] WPIX
DNC **C1997-017508**
TI New test device for microorganisms - comprising control matrix for detecting microorganisms and test matrix for detecting susceptibility to inhibitory agents.
DC A96 B04 B05 C07 D13 D15 D16
IN BERGERSON, W O
PA (FARB) BAYER AG
CYC 42
PI WO 9640981 A1 19961219 (199705)* EN 22p C12Q001-18 <--
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL OA PT SE
W: AU BB BG BR BY CA CN CZ HU IL JP KR KZ LK MX NO NZ PL RO RU SK TR UA
AU 9662212 A 19961230 (199716) C12Q001-18 <--
ZA 9604728 A 19970326 (199718) 21p C12Q000-00
ADT WO 9640981 A1 WO 1996-EP2400 19960603; AU 9662212 A AU 1996-62212 19960603; ZA 9604728 A ZA 1996-4728 19960606
FDT AU 9662212 A Based on WO 9640981
PRAI US 1995-486667 19950607
REP AU 1157876; EP 322591; EP 550903; US 3881993

IC ICM C12Q000-00; **C12Q001-18**
ICS **C12M001-18**; **C12M001-26**

AB WO 9640981 A UPAB: 19970129
Test device for analysing a sample for microorganisms and for detecting the efficacy of inhibitory agent(s) against such microorganisms, being adapted to be inoculated with the sample and incubated in a sealable container, comprises:
(a) at least 2 matrices of equivalent absorptive capacity, 1 of which (control matrix) is impregnated with a nutrient medium, a reagent and a water soluble culture-fixing agent capable of localising microorganisms on the matrix and the others of which (test matrix/matrices) are additionally impregnated with at least 1 inhibitory agent each, and
(b) opt. a substrate attached to the matrices and a sealable container enclosing the matrices and substrate
USE - The test device provides a single step test which will:
(a) identify both the presence of microorganisms and their susceptibility to inhibitory agents;
(b) determine the bacterial load in substances intended for admin. to or intake by animals or plants and the efficacy of a disinfectant(s) in reducing such a load, and
(c) determine the bacterial load on any inanimate surface and the efficacy of a disinfectant(s) in reducing such a load (all claimed).
It can be used for testing for microorganisms in e.g. urine, spinal fluid, blood, milk, food, tissue, ground water, cooling water, pharmaceutical prods. or sewage.
Dwg.0/2

FS CPI

FA AB; DCN

MC CPI: A12-L04B; A12-V03C2; C02-C; C02-Z; C04-B04B1; C04-B04D5; C04-B04H; C04-B04K; C04-F01; C07-D13; C11-C08; C12-K04A; D03-B09; D03-K03; D03-K04; D04-A01H; D05-H04; D05-H05; D05-H06; D05-H09

L51 ANSWER 21 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN **1995-178631** [23] WPIX

CR 2001-335013 [33]

DNN **N1995-140283** DNC **C1995-082674**

TI In vivo detection of urease-producing **Helicobacter** - using two reagents which react differently, through colour change, to the increase in pH.

DC B04 D16 S03

IN **MARSHALL, B**; **MARSHALL, B J**

PA (MARS-I) MARSHALL B; (MARS-I) MARSHALL B J

CYC 60

PI WO 9511672 A1 19950504 (199523)* EN 16p A61K009-28
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA US UZ VN
AU 9481270 A 19950522 (199534) A61K009-28
EP 725633 A1 19960814 (199637) EN A61K009-28
R: AT CH DE GB IE LI LU
JP 09506246 W 19970624 (199735) 17p C12Q001-58 <--
BR 9407718 A 19971111 (199801) A61K009-28
CN 1139381 A 19970101 (199809) A61K009-28

ADT WO 9511672 A1 WO 1994-US12332 19941025; AU 9481270 A AU 1994-81270 19941025; EP 725633 A1 WO 1994-US12332 19941025, EP 1995-900448 19941025; JP 09506246 W WO 1994-US12332 19941025, JP 1995-512826 19941025; BR 9407718 A BR 1994-7718 19941025, WO 1994-US12332 19941025; CN 1139381 A CN 1994-194624 19941025

FDT AU 9481270 A Based on WO 9511672; EP 725633 A1 Based on WO 9511672; JP 09506246 W Based on WO 9511672; BR 9407718 A Based on WO 9511672

PRAI US 1993-142600 19931028

REP US 5262156; US 5314804

IC ICM A61K009-28; **C12Q001-58**
ICS A61K009-48; A61K009-54; **C12Q001-04**; G01N021-77

AB WO 9511672 A UPAB: 20010625
In vivo detection of urease-producing **Helicobacter** (I) in the upper stomach comprises: (i) obtaining at least 2 separate gps. of dense carriers; (ii) combining the first gp. with a first reagent indicator (R1); (iii) combining the second gp. with a combination of a second reagent indicator (R2) and urea; (iv) encapsulating R1 and the R2-urea combination in a soluble capsule; (v) administering the capsule to a patient; (vi) causing the capsule to migrate to the gastric mucosa through the density of the carriers; (vii) dissolving the capsule containing R1 and R2-urea in the gastric juices, such that R1 and R2-urea are placed in direct contact with the gastric mucosa, allowing the urea to react with any urease present in the stomach, thus creating ammonia, the ammonia causing the pH within the stomach to increase, this causing R1 and R2 to react to the increase in pH, the reaction being viewed through endoscopy. A diagnostic device is also provided.

USE - The method is useful for in vivo diagnosis of upper gastrointestinal diseases, esp those mediated by infection of gastric mucosa by **Helicobacter pylori.**

ADVANTAGE - The novel method of detecting alkaline pH change in vivo cuts down the number of biopsies required and is safe for patients having any bleeding tendencies. It is also a rapid, low cost test. Additionally, through the colour change, it can be determined if the change is a true positive or a false positive reaction.

Dwg.0/1

FS CPI EPI
FA AB; GI; DCN
MC CPI: B04-F10; B04-L05; B10-A13C; B11-C07B1; **B12-K04A**; D05-H04
EPI: S03-E04E; S03-E14H9

L51 ANSWER 22 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1994-065673** [08] WPIX
DNN **N1994-051382** DNC **C1994-029513**
TI System for monitoring cell cultures in multi-well tray - uses lid with printed circuit board connectable to monitoring circuitry with pairs of conductive pins projecting through lid to enter wells.
DC D16 S03 V04
IN HUBER, O W; MALIN, P J; WADA, K R
PA (CELL-N) CELLSTAT TECHNOLOGIES INC; (ONCO-N) ONCOTHERAPEUTICS
CYC 20
PI WO 9403583 A1 19940217 (199408)* 31p C12M001-18 <--
RW: AT BE CH DE DK ES FR GB GR IT LU MC NL SE
W: CA JP KR RU US
EP 655086 A1 19950531 (199526) EN C12M001-18 <--
R: AT BE CH DE FR GB IT LI LU NL SE
JP 08500438 W 19960116 (199642) 32p G01N027-04
US 5643742 A 19970701 (199732) 11p C12Q001-00 <--
EP 655086 A4 19970625 (199746) C12M001-18 <--
JP 3288378 B2 20020604 (200240) 11p G01N027-04
JP 2002116170 A 20020419 (200243) 10p G01N027-04
EP 655086 B1 20031217 (200404) EN C12M001-18 <--
R: AT BE CH DE FR GB IT LI LU NL SE
DE 69233275 E 20040129 (200416) C12M001-18 <--
ADT WO 9403583 A1 WO 1992-US6269 19920729; EP 655086 A1 EP 1992-916640 19920729, WO 1992-US6269 19920729; JP 08500438 W WO 1992-US6269 19920729, JP 1994-505231 19920729; US 5643742 A Cont of US 1990-503791 19900403, Cont of US 1992-883063 19920508, WO 1992-US6269 19920729, CIP of US 1993-125507 19930923, US 1995-374542 19950323; EP 655086 A4 EP 1992-916640 ; JP 3288378 B2 WO 1992-US6269 19920729, JP 1994-505231 19920729; JP 2002116170 A Div ex WO 1992-US6269 19920729, Div ex JP 1994-505231 19920729, JP 2001-230655 19920729; EP 655086 B1 EP 1992-916640 19920729, WO 1992-US6269 19920729; DE 69233275 E DE 1992-633275 19920729, EP

1992-916640 19920729, WO 1992-US6269 19920729
FDT EP 655086 A1 Based on WO 9403583; JP 08500438 W Based on WO 9403583; US 5643742 A Based on WO 9403583; JP 3288378 B2 Previous Publ. JP 08500438, Based on WO 9403583; EP 655086 B1 Based on WO 9403583; DE 69233275 E Based on EP 655086, Based on WO 9403583
PRAI WO 1992-US6269 19920729
REP US 3743581; US 3890201; US 4072578; US 4246343; US 4264728; US 4156180; US 4230983; US 4789635; US 4801546
IC ICM **C12M001-18**; **C12Q001-00**; G01N027-04
ICS **C12M001-42**; C12N001-00; **C12Q001-02**; **C12Q001-06**; **C12Q001-08**; **C12Q001-20**; G01N027-02; G01N033-48; G01N033-483
ICA **C12M001-34**; C12M003-00
AB WO 9403583 A UPAB: 19940407
Cells being cultured in a multicell tray are electronically monitored. The appts. includes a lid which, in use, blocks the open mouths of the wells and includes on its top surface a PCB. A series of pin sockets, one for each trace of the PCB, passes through the lid, each supporting one conductive pin which is positioned to enter a well. A pair of pins enter each well so that a voltage can be applied across them and the resulting signals transferred to the circuitry for monitoring using a computer.
USE/ADVANTAGE - The system monitors the records and growth of cells being cultured in a laboratory. There is good electrical connection between the pins and PCB traces. The system achieves high stability giving precise measurements. It does not harm the cells.
Dwg.4/6
FS CPI EPI
FA AB; GI
MC CPI: D05-H09
EPI: S03-E02D; S03-E14H9; V04-Q02A
ABEQ US 5643742 A UPAB: 19970806
A method for electronically monitoring and recording cells being cultured in a laboratory tray having a plurality of separate wells, each of the plurality of separate wells adapted for holding a quantity of cell growth media in which cells may be cultured, the method comprising the steps of: a. providing a laboratory tray having a plurality of separate wells, each of the wells adapted for holding a quantity of cell growth media in which cells may be cultured; b. disposing a pair of electrically conductive, elongated pins respectively through an open end of each of the wells in the laboratory tray to extend into cell growth media held therein; c. supplying an alternating current voltage for selective application across a pair of the electrically conductive, elongated pins for electronically monitoring and recording cells being cultured in the laboratory tray; d. prior to selecting a pair of the electrically conductive, elongated pins for application of the alternating current voltage, determining a delay period for the alternating current voltage equivalent to an interval of time between the alternating current voltage having an instantaneous potential of zero volts and having an instantaneous potential equal to the maximum voltage of the alternating current voltage; and e. upon selecting a pair of electrically conductive, elongated pins for application of the alternating current voltage, measuring electrical conductivity between the pair of electrically conductive, elongated pins, at a point where the alternating current voltage reaches a maximum voltage, the point being set by the delay period.
Dwg.0/6

L51 ANSWER 23 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1994-009123** [02] WPIX
DNC **C1994-003666**
TI Device for carrying out numerous microbiological tests - is subdivided into test areas by lines containing antibacterial agent, preventing interference between adjacent areas.
DC B04 D16

IN CITRI, N
PA (YISS) YISSUM RES & DEV CO; (YISS) YISSUM RES DEV HEBREW UNIV JERUSALEM
CYC 18
PI EP 576753 A1 19940105 (199402)* EN 7p C12M001-20 <--
R: AT BE CH DE DK ES FR GB GR IT LI LU MC NL PT SE
JP 06078747 A 19940322 (199416)# 6p C12M001-34 <--
US 5344761 A 19940906 (199435)# 5p C12Q001-02 <--
EP 576753 B1 19971105 (199749) EN 7p C12M001-20 <--
R: AT BE CH DE DK ES FR GB GR IT LI LU MC NL PT SE
DE 69223045 E 19971211 (199804) C12M001-20 <--
ADT EP 576753 A1 EP 1992-306115 19920702; JP 06078747 A JP 1992-198355 19920724; US 5344761 A US 1992-909788 19920707; EP 576753 B1 EP 1992-306115 19920702; DE 69223045 E DE 1992-623045 19920702, EP 1992-306115 19920702
FDT DE 69223045 E Based on EP 576753
PRAI EP 1992-306115 19920702
REP 1.Jnl.Ref; DE 2840830; FR 1331874; FR 2350106; GB 2134781; JP 59122565; US 3838012; US 4087332
IC ICM **C12M001-20**; **C12M001-34**; **C12Q001-02**
ICS **C12M001-18**; C12N011-12; **C12Q001-04**; **C12Q001-18**

AB EP 576753 A UPAB: 19940223
The solid support for bacterial culture has an adsorbent testing surface for solid-phase bacterioloical testing. The surface is sub-divided by intersecting lines of antibacterial compositions into many individual test areas. The lines serve as barriers for preventing interference between adjacent test areas.

Pref embodiment uses a filter paper pad impregnated with a starch-iodine mixture and cut into a rectangular strip (2) at the end (3) of which are triangular extensions (4,6). A meandering switchback line (8) is drawn using a permanent marker. The line defines two pairs of closed-end channels (10,12,14,16) whose open ends are open to fluid diffusion of solns. deposited on extensions (4,6). Spots of benzylpenicillin (18,20) are deposited in the mouths of channels (10,14) and spots of cloxacillin in the mouths of the other channels (12,16). Extension (4) is dipped in clean control milk and extension (6) in specimen milk to be tested. If the specimen contains beta-lactase, its activity against benzylpenicllin and cloxacillin is assessed by observing discolouration of the test channels as compared with the adjacent control channels. Pref. the lines contain an aniline dye. The composition containing the dye may be Brilliant Green or ink. The testing surface may be supported on a solidifying growth medium, especially one contg agar-agar.

USE/ADVANTAGE - The device may be used for microbiological assays. Increased density of testing areas can be provided without any structural barriers.

Dwg.0/1

FS CPI
FA AB; DCN
MC CPI: B02-P03; B04-C02B2; **B04-F10**; B04-L05B; B05-C07; B11-A01; B11-C08E1; B12-K04; D05-H; D05-H09

ABEQ US 5344761 A UPAB: 19941021
Solid support for bacterial culture has an absorbent testing surface for solid phase bacteriological testing comprises non-diffusing lines of water-insol. antibacterial compsn. comprising aniline dye inhibiting bacteria, subdividing the surface into adjacent test areas. The antibacterial compsn. serves as a barrier for preventing interference between adjacent test areas. The surface includes a bacterial growth medium or is supported on a solidifying bacterial growth medium.

USE/ADVANTAGE - For carrying out microbiological assays. It allows greater increase in density of testing areas without requiring any structure barriers. It is applied to any form or shape of solid assay, and is not subject to limitations inherent to the design or modification of bacteriological culture wave.

Dwg.0/1
ABEQ EP 576753 B UPAB: 19971211
A solid support for bacterial culture of the type having an absorbent testing surface for solid phase bacteriological testing, comprising a plurality of intersecting lines of antibacterial compositions subdividing said surface into a multiplicity of individual test areas, said antibacterial compositions serving as an effective barrier for preventing interference between adjacent test areas.
Dwg.0/1

L51 ANSWER 24 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1990-290337** [38] WPIX
DNC **C1990-125360**
TI Culturing cells and identifying products - using surface divided into growth areas to limit amount of growth medium available.
DC A97 B04 D16
IN SNEATH, P H A; SNEATH, P H
PA (UYLE-N) UNIV LEICESTER
CYC 18
PI WO 9010056 A 19900907 (199038)*
RW: AT BE CH DE DK ES FR GB IT LU NL SE
W: AU CA JP SU US
AU 9051684 A 19900926 (199050)
EP 461153 A 19911218 (199151)
R: AT BE CH DE ES FR GB IT LI LU NL SE
JP 04507191 W 19921217 (199305) 10p C12N001-00
US 5264344 A 19931123 (199348) 8p G01N033-569
ADT EP 461153 A EP 1990-903906 19900228; JP 04507191 W JP 1990-503955 19900228, WO 1990-GB316 19900228; US 5264344 A WO 1990-GB316 19900228, US 1991-752453 19911101
FDT JP 04507191 W Based on WO 9010056; US 5264344 A Based on WO 9010056
PRAI GB 1989-5001 19890304
REP EP 62457; GB 2175313; US 4485171; US 4537860; US 4661458
IC ICM G01N033-569
ICS **C12M001-18**; C12M003-00; C12N001-04; C12N005-00; **C12Q001-24**
AB WO 9010056 A UPAB: 19930928
A method of culturing cells which produce prods and encouraging the cells to produce prods and identifying the prods is claimed, characterised in that the cells are cultured on the surface of a growth medium, which surface has been divided into growth areas limiting the amt of growth medium which is available to the cells so that these reach a metabolic stage in which the prods are produced, and identifying the prods by an in situ screening procedure.

The growth medium may be bounded by a membrane formed of eg polyethylene or metal. A non-toxic coloured material, eg Indian ink, may be applied to the surface of the membrane which contacts the medium and is partially transferred to the medium. A detergent, eg polyoxyethylenesorbitan may be added to the coloured material to assist transfer. Also claimed is a membrane for use in culturing cells and encouraging these to produce prods, characterised in that the membrane contains apertures of circular cross section each defining an area of 0.8-113 mm2.

ADVANTAGE - Use of the membranes increases the speed of work involving numerous microorganisms or cells, increases the likelihood that each aperture contains a pure culture and enables automation and standardisation of techniques involving cell culture in industrial processes. The method aids automatic inoculation aspects and automatic detection of required cell prods by restricting cell growth to designated positions.
FS CPI
FA AB; DCN
MC CPI: A12-V03C2; A12-W11L; B02-Z; **B04-B02B**; B04-B02C; B04-B04A;

B04-B04C5; B04-C03B; B10-C02; B11-C08E1; B12-K04A; D05-H02; D05-H08; D05-H09; D11-B02

ABEQ US 5264344 A UPAB: 19940120

Cell products are produced from cells in a growth arrest metabolic stage by growing cells on the surface of a nutrient medium divided into spaced growth areas by contacting the surface with a removable impermeable film having spaced apertures defining areas of medium available to the cells. Non-toxic coloured material is applied to the film surface contacting the medium and is partially transferred to the medium surface to permit identification and location of cells.

The film is pref. of polyethylene or a metallic material, can be retained in a Petri dish and has circular apertures of 3-13 mm2 area and spaced by 6-10mm in rows and columns. Polyoxyethylenesorbitan is pref. added to the coloured material, which may be an Indian ink, to assist transfer to the medium.

USE/ADVANTAGE - E.g. for prodn. of antibiotic, anti-tumour agent such as mitomycin C or heat-stable enzyme, facilitates in-situ screening and handling.

Dwg.0/6

L51 ANSWER 25 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN

AN 1990-164029 [21] WPIX

DNN **N1990-127298** DNC **C1990-071559**

TI Liquid sampling appts. - has transverse partition separating container into compartments housing actuating and sampling parts of sampling member.

DC B04 D16 J04 S03

IN FUNKE, H; HOLMBERG, O; LUNDIN, A

PA (FUNK-I) FUNKE H; (HOLM-I) HOLMBERG O; (LUND-I) LUNDIN A

CYC 21

PI WO 9004647 A 19900503 (199021)* EN 16p
RW: AT BE CH DE FR GB IT LU NL SE
W: AU BR DK FI JP KP KR LK NO US
SE 8803834 A 19900427 (199026)
AU 8944814 A 19900514 (199031)
EP 440699 A 19910814 (199133)
R: AT BE CH DE FR GB IT LI LU NL SE
SE 466604 B 19920309 (199213)
EP 440699 B1 19941221 (199504) EN 10p C12Q001-24 <--
R: AT BE CH DE FR GB IT LI LU NL SE
DE 68920154 E 19950202 (199510) C12Q001-24 <--

ADT EP 440699 A EP 1989-911908 19891025; SE 466604 B SE 1988-3834 19881026; EP 440699 B1 EP 1989-911908 19891025, WO 1989-SE594 19891025; DE 68920154 E DE 1989-620154 19891025, EP 1989-911908 19891025, WO 1989-SE594 19891025

FDT EP 440699 B1 Based on WO 9004647; DE 68920154 E Based on EP 440699, Based on WO 9004647

PRAI SE 1988-3834 19881026

REP EP 128422; US 4136680; WO 8607094

IC **C12M001-28**; **C12Q001-24**; G01N031-22
ICM **C12Q001-24**
ICS **C12M001-28**; **C12Q001-66**; G01N031-22

AB WO 9004647 A UPAB: 19941115

Liquid sampling appts., comprises a container (1) or at least one sampling member (11) which is exposable and retractable w.r.t. a sampling part (15) joined to an actuating;part (13).

The two parts (13,15) are at opposite sides of a transverse partition (7) separating the container into two compartments (3,5). Pref. the container has a pivotally openable and closable end wall, and the sampling member (11) has two detachable sampling elements (17,19).

USE - Taking urine samples, or milk samples in testing cows for mastitis.

1/5@

Dwg.1/5

FS CPI EPI

FA AB; GI; DCN
MC CPI: B04-B04B; **B11-C06**; **B11-C08C**; B12-K04A; B12-L09;
D03-B09; J04-C
EPI: S03-E13B; S03-E14A
ABEQ EP 440699 B UPAB: 19950201
Device for sampling a liquid medium comprising a container (1) which by a transverse partition (7) is divided into two compartments (3,5) containing at least one sampling element (11) comprising an operational part (13) placed in one compartment (3) and a sampling past (15) placed in the other compartment (5), the end wall of the container (1) in connection with said other compartment being provided with an opening (29) opposite to the sampling member (11) through which said member by means of the respective operational part (13) can be pushed out of the container (1) for exposing the sampling part (15) and for the uptake of sample thereon and then be retracted into the container (1) for protection during transportation, characterised in that said other compartment (5) is substantially closed against the environment and contains a drying agent.
Dwg.1/5

L51 ANSWER 26 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1985-190029** [32] WPIX
DNC C1985-083108
TI Multi dish container for typing microorganisms especially pathogens - has individual filling passage into each dish which has pre-sealed removable cover.
DC D16
IN BRUSEWITZ, G; SIECK, R; BRUESEWITZ, G
PA (MADU) MADAUS & CO GMBH; (MADU) MADAUS AG
CYC 26
PI

BE 901538	A	19850722 (198532)*	21p		
GB 2156517	A	19851009 (198541)			
DE 3434851	A	19851031 (198545)			
FR 2561659	A	19850927 (198545)			
NL 8403938	A	19851016 (198546)			
PT 80101	A	19851003 (198546)			
SE 8501431	A	19850927 (198546)			
NO 8501189	A	19851021 (198549)			
AU 8540341	A	19851003 (198551)			
JP 60224485	A	19851108 (198551)			
BR 8501339	A	19851119 (198601)			
DK 8501337	A	19850927 (198601)			
FI 8501151	A	19850927 (198603)			
ZA 8502214	A	19850925 (198605)			
DD 232508	A	19860129 (198622)			
CH 659083	A	19861231 (198702)			
JP 62034389	B	19870727 (198733)			
US 4690896	A	19870901 (198737)			
GB 2156517	B	19880106 (198801)			
DE 3434851	C	19880407 (198814)			
KR 8800455	B	19880406 (198837)			
AT 8500699	A	19890115 (198908)			
CA 1249502	A	19890131 (198912)			
IT 1185517	B	19871112 (199042)			
NL 190165	B	19930616 (199326)	8p	C12Q001-04	<--
DK 169181	B	19940905 (199434)		C12M001-16	<--

ADT BE 901538 A BE 1985-901538 19850121; GB 2156517 A GB 1985-3168 19850207; DE 3434851 A DE 1984-3034851 19840922; FR 2561659 A FR 1985-592 19850116; NL 8403938 A NL 1984-3938 19841224; JP 60224485 A JP 1985-59732 19850326; ZA 8502214 A ZA 1985-2214 19850325; US 4690896 A US 1985-696533 19850130; DE 3434851 C DE 1984-3434851 19840922; NL 190165 B NL 1984-3938 19841224; DK 169181 B DK 1985-1337 19850325
FDT DK 169181 B Previous Publ. DK 8501337
PRAI DE 1984-3411072 19840326; DE 1984-3434851 19840922

IC **C12M001-18; C12Q001-04**; G01N033-48
ICM **C12M001-16; C12Q001-04**
ICS **C12M001-18**; G01N033-48
AB BE 901538 A UPAB: 19930925
The container is of the type in which the individual dishes are charged with nutrients, e.g. agar-agar, and where a removable cover is fitted over each pocket. Several long dishes extend longitudinally upon a support frame and the nutrient in each dish is covered with a removable waterproof protector e.g. plastic film bonded to the edge of the dish. integral with the support frame at one end is a set of filling passages, one passage leading into each dish.

Pref. each of the filling passages is pref. in the form of a short pipe. The pipe ends are plugged simultaneously by spigots on the underside of a cover plate. The support frame is housed inside at one end while the other end is sealed by the cover plate as the plug spigots enter the filling passages.

USE/ADVANTAGE - The dishes are for microbiological tests to determine the type and concentration of microorganisms,. partic. germs. Used by doctors and hospitals for diagnostic work and for checking germ levers in controlling the hygiene of industrial processes, e.g. food mfr.. The dishes are fitted with removable waterproof cover films to avoid drying out are contamination of the nutrient. The pre-covered sterile dishes can be automatically filled in sterile fashion using hollow needles via the filling passages. No possibility of migration of particles between dishes. 0/15
FS CPI
FA AB
MC CPI: D05-H02; D05-H04; D05-H05; D05-H06
ABEQ DE 3434851 C UPAB: 19930925
Device for the determination of microorganisms is a vessel with a cover in which an elongated carrier element is enclosed. The latter has several recesses to receive a nutrient medium. Each recess has a filler opening on top which can be closed by a stopper attached to the cover.

ADVANTAGE - The complete devices can be produced by machines for all necessary operations under sterile conditions. They have a long shelf life without loss of sterility.
ABEQ GB 2156517 B UPAB: 19930925
Device for the determination of micro-organisms, comprising a vessel closable with a cover in which vessel is housed a nutrient medium carrier in the form of a longitudinal carrier body which has a plurality of troughs for the reception of nutrient substrate substances, said troughs being provided with a removable covering, wherein at least one closable filler connection, formed on the carrier body, opens into each trough.
ABEQ US 4690896 A UPAB: 19930925
Micro-organisms determin. appts. comprises vessel with removable cover and contg. a long body divided into several lengthwise troughs for receiving nutrient substrate substances, each trough having a removable cover and the body having top closable filler connections to the troughs.

The filler connections are partially formed by a common encompassing wall following the cross-sectional shape of the body. Pref. the filler connections intersect, and at the intersection is a blind hole into which engages a pin of the removable cover,which screws onto the vessel.

USE/ADVANTAGE - Fully sterile storage of incubating cultures during determn. ofpathogens content.
ABEQ NL 190165 B UPAB: 19931116
Microorganisms are concentrated in equipment comprising a vessel with sealing lid and contg. an oblong body supporting a nutrition base. This has a number of phials accommodating ingredients for the base and with a removable top cover. A filler union on a supporting body delivers into each phial and can b e shut off. The removable cover is of thin flexible sheet material sealed to the supporting body, and there is a separately-detachable piece of sheet material on each phial. All the unions can be on

the top of the supporting body, and where the latter is plate-shaped with phials on both surfaces, the unions on the top surface can be offset from each other.

ADVANTAGE - All manufacturing operations can be achieved mechanically and free of germs. The equipment can be stored for a long period without reducing sterility.

Dwg.0/10

L51 ANSWER 27 OF 27 WPIX COPYRIGHT 2004 THOMSON DERWENT on STN
AN **1982-79577E** [38] WPIX
TI Microorganisms test tray - has cells divided into sample and reagent wells by sloping barrier.
DC D16 Q32
IN ENOMOTO, S; IIDA, T; KIMURA, M
PA (EIKE-N) EIKEN-CHEM CO LTD
CYC 5
PI GB 2094831 A 19820922 (198238)* 6p
DE 3128415 A 19820930 (198240)
FR 2502173 A 19820924 (198245)
US 4370419 A 19830125 (198306)
GB 2094831 B 19840822 (198434)
DE 3128415 C 19850530 (198523)
IT 1171435 B 19870610 (199004)
ADT GB 2094831 A GB 1981-21661 19810714; DE 3128415 A DE 1981-3128415 19810717
PRAI JP 1981-38022U 19810318
IC B65D001-36; **C12M001-18**; **C12Q001-04**
AB GB 2094831 A UPAB: 19930915
A tray has a cover and a plastics or glass body divided by transverse partitions into cells. Each cell is dived by a barrier with its top lower than the partition into a well for bacterial suspension and a second well. The barrier slope up from the first cell at a low gradient to the barrier top and then falls abruptly as the side of the second well.

Each second well pref. has two shallow recesses in its base to hold growth media components. The partitions are pref. 2 mm lower than the peripheral wall and the cover has outwardly diverging vent passages. The arrangement facilitates pouring of suspension and prevents backflow from the second cells.

FS CPI GMPI
FA AB
MC CPI: D05-H04; D05-H05; D05-H06
ABEQ GB 2094831 B UPAB: 19930915
A tray for identifying microorganisms comprising a tray body made of a plastics material or glass and a cover, the tray body being divided into a number of cellular compartments by partition walls arranged at substantially equal intervals along the length of the tray body with each of the cellular compartments being divided into a larger cell for bacterial suspension and a smaller cell by a crest-shaped barrier formed substantially at the centre of the respective cellular compartment, the barriers being so formed that their top portions are lower in height than the upper surfaces of the partition walls,wherein each crest barrier comprises a slope portion rising from the cell for bacterial suspension and a substantially more steep slope portion dropping downwards to the smaller cell, and wherein the small cell of each cellular compartment has at least two wells or shallow recesses formed on its bottom surface, the cells for bacterial suspension being in communication with their respective smaller cells over the respective barriers.
ABEQ DE 3128415 C UPAB: 19930915
A dish for identifying microorganisms is in the form of a tray with lid made of plastics or glass. The tray is subdivided into numerous cells by transverse partitions, each cell being further subdivided into a large compartment for bcaterial suspension and smaller compartment for reagent, with a crest sepg. the two compartments; this crest slopes up gently from the larger, bacterial suspension compartment and drops vertically into the

smaller, reagent compartment.

The partitions between cells are substantially of the same height as the peripheral wall of the tray or dish except for the end of the bacterial compartment furthest from the small cell; here the partition is approx. 2 mm above the bottom of the cell and in the region of the peripheral wall of the tray it is formed as an end wall.

USE/ADVANTAGE - For identifying microorganisms by means of reagents. The form of the cells achieves highly uniform results.

=>